

MANUFACTURERS' RECORD

A
WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

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[Continued on Page 77.]

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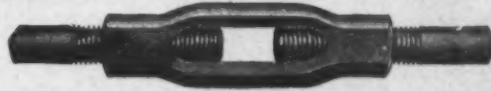
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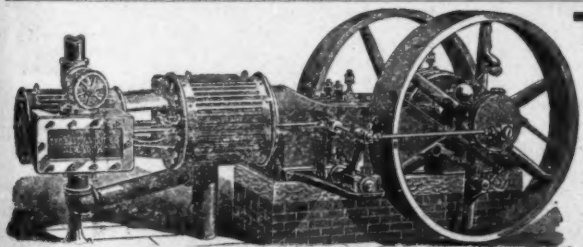
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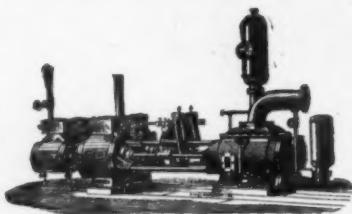
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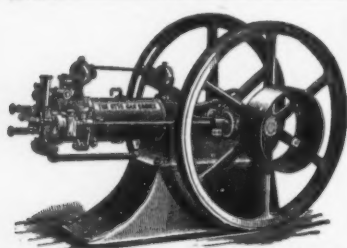
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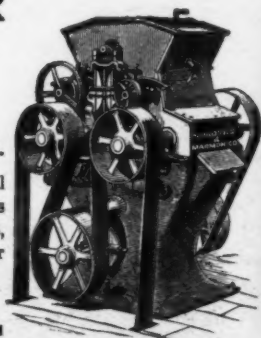
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MANUFACTURERS' RECORD

A Southern Industrial, Railroad and Financial Newspaper.

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WEEKLY. }

BALTIMORE, SEPTEMBER 12, 1891.

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Manufacturers' Record

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BALTIMORE, SEPTEMBER 12, 1891.

AN adequate water supply and a fire department thoroughly equipped, manned and disciplined, are essential to the well-being of a modern American city. All these cost considerable money, and cities that have not established them are usually slow to do so until heavy losses, caused by a sweeping fire that might have been extinguished had an efficient service been at command, and the subsequent raising of rates by insurance companies, compel taxpayers to weigh the difference between a false and a true economy. Jacksonville, Fla., is now undergoing the same experience that many other cities have had, because of the lack of an efficient fire department. Within three weeks the fire underwriters have twice advanced rates, 25 per cent. each time, while declining to insure more than three-fourths the cash value of any property. The reason was that there have recently been disastrous conflagrations in that city by which the insurance companies met with heavy losses that might have been prevented by a capable fire department. Every city should cheerfully impose whatever taxes may be necessary to secure ample protection against fire, for the annual expense incurred will be less of a tax upon property owners than what they are compelled to pay to insurance companies when such precautions have not been provided.

"MONEY WANTED" advertised free of charge by the MANUFACTURERS' RECORD.

The Manufacturers' Record's London Office.

The MANUFACTURERS' RECORD has opened a London office at 21 Bedford street, Strand, in charge of Mr. Robert McClure.

During the past two or three years British interest in Southern investments has steadily grown. Concomitantly, and both as a cause and a result of that interest, the circulation of the MANUFACTURERS' RECORD in Great Britain has increased, and we have been more and more called upon by British investors for information about the South, while the English press has quoted almost as liberally from our columns as have the newspapers in this country. The awakening in England, Scotland and Wales to the opportunities for profitable and safe investment in the South has now assumed such proportions and character that a London office for the recognized exponent of the industrial South under intelligent and capable supervision has become a necessity. The interest displayed on the other side is no longer occasional and sporadic, but general and continuous. In order, therefore, that the facts about Southern development may be as easily obtainable in London as in New York, and that investments may be facilitated and stimulated, the MANUFACTURERS' RECORD has determined, after a careful survey of the situation by a member of its staff sent to London for that purpose, to establish in that great financial center of the world a first-class representation.

It is contemplated that through the active measures of this bureau the facts about the South shall be brought home to the investing public. We shall

endeavor to keep the MANUFACTURERS' RECORD before the eyes of the hundreds of financial people to whom the judicious investment of a constantly accumulating surplus entrusted to them from thousands of different sources is a delicate and difficult trust. It will be sought to fix the attention of these men upon the South, to inform them minutely and reliably, to induce investigation, to establish confidence; in short, to give such assistance as may be possible to establishing unrestrained and permanent financial intercourse between London and the South.

A further advantage of this London connection will lie in the fact that the South, through the MANUFACTURERS' RECORD, will be kept fully informed of the conditions and possibilities which await Southern enterprises on the other side. As a result of the MANUFACTURERS' RECORD's work in London we confidently hope that London will become to a greater degree familiarized with Southern investments, and that financial London, distributing vast sums of money to the four corners of the earth, will become less and less a sealed book to owners of Southern properties.

From the beginning of Southern development the MANUFACTURERS' RECORD has had a distinct mission. It has been the medium of introduction and intercourse between the possessors of the great natural wealth of the South and the investing class of other sections. The former have relied upon it to make known fairly and intelligently the resources, advantages and attractions of their favored land; the latter have looked to it for information and guidance in locating industries and placing investments. In establishing the MANUFACTURERS' REC-

ORD in London we are simply pushing along the same lines and improving an opportunity for the advancement of the South which has for some time been made apparent by the growth of the MANUFACTURERS' RECORD's influence and circulation in Great Britain.

Rothschild's Commendation of American Securities.

Last fall, when the financial troubles in Europe commenced, the MANUFACTURERS' RECORD claimed that the United States, and especially the South, would stand the strain so well that the result would be a heavy investment of foreign capital in this country during 1891. This is already being seen, and is admirably illustrated in the following cable to the New York Journal of Finance:

PARIS, Sept. 7.—The Journal of Finance correspondent is permitted to make the following extract from an extended letter written within the last few days to a family connection by Baron J. Rothschild. The permission is from Baron Rothschild himself. The letter says:

"For the investment of the sum of money you name I can recommend chiefly the advisability of buying American railways. Here you will find the maximum of probable profit and the minimum of risk.

"During the unhappy circumstances that have demoralized the whole financial world during the year past America has loomed up almost alone unhurt and stalwart. What has damaged the rest of the world has largely, indeed, been to America's advantage.

"We have this day received advices from New York which add materially to our confidence in the future there, and for this reason, respected cousin, we have no hesitancy in counseling you to invest your funds in American shares. We especially indorse Louisville & Nashville Railroad, with which it happens we have direct relation, but also such stocks as are oldest among what in the American list are known as 'Western,' inclusive of the Atchison, Topeka & Santa Fe, the Chicago, St. Paul & Milwaukee, and also (though it is not a 'Western') the Philadelphia & Reading stock income bonds. In any of these we are confident that you will find profitable investment."

The letter goes into many other things—largely the risk involved in South American—but what we quote is of chief interest to readers of the Journal of Finance.

Develop Diversified Industries

For some years or more the MANUFACTURERS' RECORD has endeavored to keep before its readers in the iron and coal districts of the South these practical truths: First, that iron ore and coal production must precede the building of furnaces; second, that in the immediate neighborhood of Southern iron furnaces other industries must be established to use their products. While we have rejoiced in the demonstrated fact that pig iron can be made with profit at a lower cost in the South than in any other section, we have also seen that the real profit to Southern furnaces must, in the long run, come from the creation of industrial establishments in their immediate neighborhood that would take their entire products. While Birmingham and Anniston in Alabama, Roanoke and some other cities in Virginia, Chattanooga, South Pittsburg and other cities in Tennessee, and a score of others that might be named, have adjusted their industrial enterprises on this plan, there have been many others that have not, and as a result there are towns where iron furnaces have been built whose projectors are puzzled to know where they can get the ores and coke to keep them running at a profit. We do not wish to be understood as saying that any one of these furnaces has been located where it cannot be worked to advantage, for we know of not a single instance of that kind in the South, but we do insist that the owners of all iron furnaces in the South will find it for their profit to secure manufacturing plants in close proximity to them that will consume their output.

Mr. Edwin C. Pechin, of Roanoke, Va., has recently published articles on this subject that are filled with practical suggestions on the same line. In one of these he says:

The true index of a community's progress and prosperity is not the raw pig iron it is making or can make, but what amount of iron and steel it produces in finished forms. The making of pig iron to be shipped away on a slender margin of profit, so far from being an advantage, is a positive loss. The coal and ore are being exhausted and the machinery worn out without any adequate return.

At the present time neither Alabama nor Virginia need any more furnaces. What they want and must have to be prosperous are the mills and foundries and shops right at home to work up all the pig iron that they are now making or can make. This is true development and true progress. First supply the home market with manufactured goods, then seek neutral markets and then competitive ones.

Alabama's 900,000 tons of iron, if sold at \$12 a ton, means \$11,000,000 distributed. If put into even cheap castings it means \$25,000,000. If worked into the higher forms of iron and steel it means from \$30,000,000 to \$50,000,000.

Commenting on this the Valley Virginian, of Clifton Forge, Va., forcibly says:

The idea suggested applies with peculiar force to this section of the State. We have four or five blast furnaces in operation turning out more than 2,000 tons of

pig metal weekly, and not one industry to work it up into finished form. The cream of our wealth is thus carried away to give employment to skilled workmen in other States and to build up industrial centers there instead of at home, where the raw material is found. That we have unusual advantages here for industries to work up pig metal is not disputed. An argument used by Mr. E. J. Bird why he desired to locate a nail mill and muck bar mill at Low Moor was that he could get the raw material \$2 a ton less there than where he had been engaged in Ohio. From a paper now before us, issued by W. S. Whitman, the intelligent president of the Old Dominion Stove Co., now erecting a plant to make stoves at Clifton Forge, he says: "There are two stove foundries in Virginia, one in North Carolina and none in South Carolina. These three States depend almost entirely on Ohio and Pennsylvania to supply them with stoves. A foundry in Ohio selling stoves in these States must haul them from 300 to 900 miles, and the freight charges vary from \$4 to \$25 per ton, and the Pennsylvania foundries at least as much. These foundries use about 50 per cent. Virginia iron in the manufacture of their products, and it costs them \$2.50 per ton freight on their iron to have it hauled to the foundries. These items alone will pay a handsome dividend on this plant. We claim in the matter of freights alone a saving of \$8 per ton on every ton of stoves produced under what it is now costing the Ohio and Pennsylvania foundries to get into this market, and we are in a position to shut them completely out of this market. Virginia alone will use 50,000 stoves per year, and if we can only sell one-fourth of this number we can make 30 per cent. on our stock after paying our interest charges. We can not only shut out foreign competition, but we can go right into the States North and undersell the foundries there. We claim a saving in cost of iron and coke of \$3.40 per ton. Our freight rates to competing points in Ohio, Indiana and Illinois are the same as local rates in these States. Rates, for instance, from Cincinnati or Columbus, Ohio, to Chicago, Ill., are \$3 per ton, against \$4 from Clifton Forge, giving us a clear advantage in the Chicago market of \$2.40 per ton, which market is recognized as the largest in the United States."

These are well stated, practical truths. The sooner the Southern iron districts realize them the more rapid will be their prosperity. Nothing would better suit the aggregated capital of the North engaged in manufacturing pig iron into the diverse forms in which it is used than for the South to confine itself to that line of production, or to the coarser forms into which pig iron is converted. To build up a permanently profitable business Southern iron and steel must be worked up into everything from car wheels and boilers to fish hooks and watch springs in the neighborhood of its mines and furnaces. When that time comes, as it certainly will, the South will lead every other part of the world in those industries for which its coal and ore fields furnish inexhaustible raw materials.

It is reported that President Kimball, who is now in Europe, has sold 50,000 shares of Norfolk & Western Railroad stock at \$50, thus securing \$2,500,000 with which to carry on the improvements of the road, extensions, etc.

Tennessee's Opportunity.

The legislature of Tennessee, now in special session in response to the call of the governor of that State, has before both houses bills providing for an appropriation sufficient to pay the expenses of collecting and exhibiting the resources of Tennessee at the World's Columbian Exposition. Several of the usually well-informed newspapers of that State intimate that the legislature will make no appropriation for this purpose. The MANUFACTURERS' RECORD hopes that those journals are mistaken. It cannot be possible that a majority of the members of the legislature are so destitute of patriotism and of a true appreciation of the grand results that would follow an exhibition of their splendid natural resources and of the progress already made in their development, as to neglect this opportunity to show them to the world.

Can it be that the members of that body do not know what an inflow of capital their State received from the several exhibits made at Atlanta in 1881 by the Cincinnati Southern and the Louisville & Nashville Railroads, and by the Chamber of Commerce of Chattanooga? These were independent exhibits gathered from separate districts of the State, but together they made an impression on capitalists and manufacturers elsewhere that resulted in the investment of millions of dollars. Two years later, in the autumn of 1883, Major A. J. McWhorter, then commissioner of agriculture, made an exhibit at Boston, where Tennessee and North Carolina put themselves in competition with the land grant railroads of the West, and each State was largely rewarded for the efforts and outlays made by their agricultural departments at that time, in accessions of population, investments in undeveloped lands, and in the location of new manufacturing plants within their borders. While there are no records from which accurate figures can be obtained, it is the belief of those best informed of what occurred in Tennessee between January, 1882, and January, 1886, that as a direct result of the displays made at Atlanta in the fall of 1881 and at Boston in the autumn of 1883, the tax valuation of property in Tennessee was increased by at least \$8,000,000 from investments made and enterprises started by outside capitalists.

Those small expositions were of little account in comparison with that which is to be held at Chicago. They drew to them but one or two hundred thousand visitors, of whom not more than 10 or 15 per cent. were people of enterprise and capital. The exposition at Chicago will have several million visitors from our own and from foreign countries. Among them will be many thousand capitalists from the North and from Europe whose main purpose will be to study the exhibits of the South, the fame

of whose natural resources has been carried to every great financial city on the globe. There will be many more thousands of Americans of lesser means who are considering the wisdom of giving up their Northern and Western homes for others in the South or on the Pacific coast. California, Oregon and Washington are alive to this and will make costly displays to attract settlers and capital. It is probable that those three States will expend more for this purpose than the aggregate of the entire outlay made by the South. The competition between the Northwest, the Pacific coast States and the South will be both earnest and exciting, with the advantages favoring those States of the South that shall make exhibits on a scale commensurate with their natural resources and the progress made in their development. Tennessee ought to be, and we trust will be, equal to the occasion. What says the Tennessee legislature?

A Prospective Transfer of Sumatra Tobacco Raising to the South

A citizen of Deli, Sumatra, named J. Kaufman, who is reported to have made a fortune of several millions from his tobacco plantations in that distant island of the Indian ocean, has recently been visiting Virginia, Louisiana and Kentucky in search of soil and climate suitable for the production of the Sumatra leaf. While in Chicago some days since he told a correspondent of the New York Press that the tobacco planters of that island will have lost \$50,000,000 by the operations of the McKinley bill because they could not afford to send their product to the United States under the new tariff law, and the only way they can get even is to come and start the industry in this country. He said he had found places that would produce Sumatra leaf equal to that grown on the island, and that they would have to employ American laborers in its cultivation, because the laws here prohibited the importation of coolies, "who are the best and cheapest workers in the world," according to Mr. Kaufman. That gentleman also said that "if American labor was treated to some Sumatra ideas this country would be more prosperous, and if the McKinley bill had not placed a stiff tariff on Sumatra tobacco forty plantations would not have had to shut down. We shall have to start up forty plantations in this country next year, but it will go hard with us to pay such high wages."

The correspondent says further that two wealthy Dutch tobacco planters from Sumatra who accompanied Mr. Kaufman concurred in all he said, and pronounced the soil in some parts of the South better for the Sumatra leaf than the Indian Ocean island. The party was to sail for home at once to arrange for transferring their interests to the Southern States.

What Southern Papers Are Doing.

The fiscal year in the cotton-producing States begins September 1, and ends the last day of August. The excellent custom has been adopted of late years by many enterprising and influential journals of publishing at the beginning of each recurring season a review of the last year's business of their respective cities. These are generally prepared with great painstaking, and approach as near to accuracy as any statistics can which are based in part upon estimates. Taken for a term of years they afford data of great value to business men, and, to a considerable extent, they fill in the gap between one decennial census and another, and furnish statistics which our national financiers and law-makers frequently find exceedingly useful.

To the communities immediately concerned, these annual reviews are of prime importance. They give to every citizen, whatever his vocation, a sure means of learning what progress his city has made during the past year, and what the outlook is for that upon which it has entered. If the statistics show that commerce and trade have increased, that manufactures have flourished, that public improvements have been made, that there has been a decided gain in population, in the number of buildings erected, in transportation facilities, and in the opening up of new routes by land or water that will hereafter add to the city's wealth and prosperity, he begins the new year inspired with fresh courage for its work, and with a determination to make the most of the larger opportunities that surround him.

The newspapers containing such annual reviews have an influence far beyond the area of their ordinary circulation. The facts they publish are carefully read by capitalists and business men everywhere. Many a city has been indebted to the enterprise of some of its newspapers for the creation of large manufacturing plants, the purchase of city property and the erection of costly business blocks, the building of docks and elevators, the establishment of new steamboat lines and for a multitude of other incomings that added to its business and to its taxable valuation.

It is an evidence of the progress pervading the South that all newspapers that display the public spirit and enterprise which leads to such results are prospering, and are steadily increasing their circulation and widening their field of influence.

A MEMBER of the most conspicuous New York firm in that branch of the iron business said recently to a reporter of the Recorder: "Trade in the structural iron business is exceptionally good. Building has been brisk all summer. The demand has been so active that the beam mills could not keep up with their orders,

even when running on full time. In fact, so brisk has been the demand for structural iron that more mills are being established. There is a growing tendency to use iron and steel for building purposes, and the demand is likely to continue."

Chattanooga's Pluck.

The enterprise and pluck of the people of Chattanooga, Tenn., has again been exemplified. Her business men have subscribed \$107,175 to the stock of a river steamboat company in order that a line of freight boats may be put on the Tennessee river and run between that city and ports on the Ohio and Mississippi. The history of this movement is both interesting and suggestive.

When the government engineers had completed their work at the Muscle Shell shoals, and made the Tennessee navigable from Chattanooga to its mouth, the business men of that city took it for granted that the railroad companies centering there would promptly recognize that it was a river point, and that as such it was entitled to receive the benefit of the well-established rule that river points can claim the same rates of freight by rail that can be obtained from waterways. This rule has been approved by the interstate railroad commission. But when Chattanooga shippers asked for this reduction they were informed that the railroad managers would not recognize that city as a river point until it had been practically so demonstrated. Upon learning this a business men's mass-meeting was held at the Chattanooga Opera House, August 11, at which it was resolved to establish a steamboat line on the Tennessee river, and to raise a fund of not less than \$100,000 for that purpose, said fund to be under such restrictions and safeguards that the boat line would be for a period of not less than five years under the control and management of a representative body of Chattanooga business men. A committee of seven prominent citizens was appointed to obtain subscriptions to this fund, and the meeting adjourned. That committee went to work with a will, and in exactly three weeks from the day of the mass-meeting it finished its work, the entire sum called for having been subscribed. On the following day application was made for a charter for the steamboat company, and but a short time will elapse before boats will be procured and the company begin operations.

Pluck like this is one of Chattanooga's characteristics. When her business men determine that something ought to be done, they go at it with a will and accomplish it.

GALVESTON is to have a 1,000,000-bushel grain elevator, and New Orleans one of 300,000 bushels capacity. These are signs that indicate the future growth of Southern ports.

THE SOUTH'S PROSPERITY.

More Testimony from Bankers as to the Bright Outlook.

ABUNDANT GRAIN CROPS.

The MANUFACTURERS' RECORD published last week five or six pages of letters from Southern bankers as to the outlook for business in that section. The following letters have been received since then. They all bear testimony to the solid condition of the South financially; to the large grain crops, which will keep at home millions that formerly went West for foodstuffs, and to the splendid prospects for the future:

More Cash Than for Years—Farmers and Manufacturers Prosperous.

MOREHEAD BANKING CO.,
DURHAM, N. C., September 3, 1891. }
I do not think that the rapid strides the South has made in material development will be seriously retarded by the low price of cotton. While the price for this crop is very low, it was nearly or quite made good by the large yield in former years, and last year's crop was by far the most economically raised crop ever produced in this section. As evidence of this, notwithstanding the low prices, the farmers bought more fertilizers and provisions for cash than they were ever known to do before in this section, and have more ready money than they have had for years at this season of the year, when all of the crop has, as a rule, been marketed. Another reason for the uninterrupted progress of the South is that it is no longer a grower of "cotton and tobacco only." In the last two years the farmers of this section have made rapid strides in raising their provisions at home, and there is nothing like the amount of Western provisions sold in this market as formerly, though our population has materially increased. This, with the fact that we have a steadily increasing manufacturing business that is being more diversified every year, and that our manufactured products are being sold all over the civilized world, bringing in fresh money from other countries as well as other sections of this, will, with the other reasons given above, enable us to continue our career of prosperity without interruption.

W. M. MOREHEAD, Cashier.

Abundant Crops and Great Prosperity.

BANK OF CARROLL,
HUNTINGDON, TENN., Sept. 1, 1891. }
This section is very prosperous. Abundant crops, and business in all lines above the average at this season. Our great Southern Normal University, a \$30,000 enterprise, will open on 15th with several hundred students. We are now organizing the "First National Bank of Huntingdon" with \$50,000 paid-up stock, and will open for business in about 60 days. Stock all placed at once.

R. F. TRUSLOW, Cash.

Peace and Prosperity Prevail.

THE AMERICAN NATIONAL BANK,
DALLAS, TEXAS, August 29, 1891. }
The general outlook in North Texas is by no means discouraging, notwithstanding the general cry of hard times which appears to me more imaginary than real. We have the best general crop that has been raised here for a number of years, and fair prices are being realized for the wheat and oats which are being marketed now. The corn is now fully made and will be considerably over an average yield. We have a large acreage on cotton which is doing well; gathering and marketing has commenced throughout the State, and although realizing low prices, the large crop will yield a large aggregate of money for the producers and handlers in this State. The

stock men of the West are cheerful, have had abundant rains, making grass and water plentiful and their stock in good condition and bringing reasonable prices in the markets. The producing class of people are not in debt to any considerable extent, and the proceeds of their different products this year will place them generally in easier circumstances than they have been for several years. Good health, peace and plenty prevail generally in the Lone Star State.

W. H. THOMAS.

Better Condition than Since the War.
C. C. KELLY BANKING CO.,
KOSCIUSKO, MISS., August 28th 1891. }

I would say that times are hard and money scarce, owing to the low price of cotton and the short grain crop of last year; but the present outlook for a cotton crop is good, and probably the largest grain crop, especially corn, that has been made since the war. The country is probably in a better financial condition and more evidences of prosperity than since that time. There is more improvement in the country and less desire to "sell out" than at any time for years.

C. C. KELLY.

Farmers Better Off Than Ever Before.
PLANTERS' BANK OF ELLAVILLE,
ELLAVILLE, GA., August 31, 1891. }

At no time in the history of this section of our State have there been such manufacturing enterprises and improvements in progress as to day. Our little city, instead of being affected by the financial stringency, has taken a new growth. The Ellaville Variety & Manufacturing Works is having more than it can do, and on all sides you can hear the continuous ring of the hammer and saw. Several new brick stores will soon be erected. Our farmers are better off than ever. Although the price of cotton is low, they have raised a larger crop to the acreage than heretofore; they are selling as fast as it can be marketed, and money will soon be in circulation and plentiful. Everything is now on a solid and healthy basis, and we look forward to a more prosperous year.

J. E. CLARK, Cashier.

Good Crops and No Hard Times.

BANK OF PLAQUEMINE,
PLAQUEMINE, LA., August 31, 1891. }
We can only speak for this part of Louisiana. Our business is on a very solid basis. We are in a sugar section, and the crops will be fully up to the average. Our cotton will be fully three-fourths, and our corn is more than an average. Our bank has been going three months, and we have \$36,000 on deposit. We think that the section is not very hard up as we have only loaned \$30,000 up to date. We think the South is as sound or more so than any section of our country.

J. MCWILLIAMS, President.

A Financial Leader's Testimony to the South's Splendid Prospects.

BANKING HOUSE OF
JOHN L. WILLIAMS & SON,
RICHMOND, VA., September 2, 1891. }

We take pleasure in testifying that, according to our own knowledge, the farmers in this vicinity, and we believe throughout Virginia, are rejoicing in the most bountiful harvest ever known. The wheat and corn production is unexcelled, tobacco is in a very satisfactory condition, and the fruit and vegetable crops are enormous. The farmer seems to be actually proud of what he has done, and is almost inclined to boast. His one apprehension appears to be that he will not be able to sell the increase which the earth has yielded him. Of course, apprehensions of harm from superabundant production and great substantial wealth are idle. Even should prices in some instances fall off, the abundant yield will more than compensate. The great abundance for exchange and barter promises a press of business for railroad and transportation lines. We find our collections among the farmers very much better than this time last year. For reasons now ob-

vious to all, we believe the country to be just entering upon a period of great prosperity, in which the South will receive her ample share. We do not lament the dying out of land "booms" and the collapse of bubbles. The sooner our new population gives up the idea of making fortunes in a night and settle down to earnest work, the better for all.

JOHN L. WILLIAMS & SON.

Only One Failure in Two Years.

FIRST NATIONAL BANK,
MARSHALL, TEXAS, August 29, 1891.

Our city of over 7,000 inhabitants has had only one commercial failure in nearly two years, and that was for less than \$5,000. Mortgages on business property are less than \$10,000 and the bank deposits 10 per cent. larger than last year and 15 per cent. larger than in 1889, amounting now to \$55 per capita. The present crop of corn is one of the largest ever harvested, and fruit and vegetables abundant. Cotton, our principal crop, will be above an average yield, but not so large as expected two weeks since, owing to drought and boll worms. Business generally has of course been affected by the panic of last fall and low price of cotton, and this has resulted in caution and restricted credits, but the situation is one of caution rather than distrust, and there is nothing like distress here. We have now operating successfully planing and lumber mills, large iron and car-wheel foundry, car and machine works, furniture factory, and hope soon to have woolen mill and tan-yard.

E. KEY, President.

A Northern Man Tells of the South's Progress and Prosperity.

ALABAMA NATIONAL BANK,
MOBILE, ALA., August 29, 1891.

In my opinion the capitalists of the North and of foreign countries, and investors generally, will give little heed to the stories invented by persons who are endeavoring to create distrust as to the South's continued progress. The motives of such "calamity" talkers and writers are purely selfish and are well understood, and the very fact that they are resorting to such subterfuge, if it be true that they are, is, to my mind, ample proof that they are ridiculously jealous of the progress that the South has made and is making. There have been no more failures in the South than in the East or the West, and the financial and general condition of the country will not suffer by comparison with any other. It is true the price of cotton is low. It is also true that the coming crop is promising to be large, and that the large yield will probably be an offset to the low prices should they prevail, which is doubtful in the face of a general advance of prices in less staple commodities. But it will not do to base the prosperity of the South on her cotton crop solely. It is well known that the resources of the country are vast and varied, and to a large extent undeveloped as yet. In the process of development thus far it cannot be denied that the promotion of real estate speculation has been a conspicuous element, and that through this losses have incurred; however, this applies with equal force to the East, West and North as well as the South, but this has been a distinguishing characteristic in the development of all countries, and always will be, especially in America. The speculator is indigenous to every clime and ever will be, and his appetite must be in a measure satiated. The conservative, substantial investors and home-seekers, however, have themselves investigated and will investigate the opportunities for profitable investments in the South, and when this is done the result is always favorable. Nothing of the nature of the arguments that are said to be used can retard the growth and development of the South. In spite of such subterfuges railroad building will progress, manufacturing multiply, population increase, and

the country will go right along adding to its wealth and prosperity. From observation and such information as I have gathered during my residence in Alabama, I believe there is no section of the country where better opportunities for profitable investment exist than in Mobile and the territory tributary to the city. Take for instance farming lands that in the North and West similarly located, adjacent to towns of 30,000 to 40,000 inhabitants, bring from \$50 to \$1,000 per acre, with the prospect of raising one crop a year. In this section lands can be obtained for from \$5 to \$200 per acre, capable of raising three crops a year, such as cabbage, potatoes, corn and many other kinds of vegetables raised especially for Northern markets, and which are sold at an excellent profit. Upon an investment of sufficient capital to improve 10 to 20 acres of land, an industrious and economical man can in a few years build up a small fortune, and this is being done in this section to day, and will grow in volume as Northern men become more fully acquainted with the unparalleled advantages of this climate. Mobile itself presents great opportunities for the profitable investment of capital in all lines—manufactories, real estate or any other class of legitimate business. Speaking from the standpoint of a Northern man, after a residence of sufficient duration to enable me to form an intelligent and reliable opinion, I am convinced that there is no location where better returns can be secured in the manufacture of articles intended for export to Central and South American points than Mobile offers. We are directly connected with the East, North-east, North, Northwest and West by rail, with the prospect of still further developments in that direction; we have tributary to the city unexcelled timber lands, increasing cotton acreage, truck gardens, etc. These resources, together with the inexhaustible deposits of coal and iron in the northern part of Alabama which must of necessity come to our city for export by the natural waterways, combine to make Mobile the most important point on the Gulf. The Baring troubles of last year have had a tendency to make the business men of the South cautious and conservative, as was the result elsewhere, but the financial institutions are in condition to carry their customers and supply all the legitimate demands of commerce. Those merchants and factors in this section who have made advances on cotton have done it with the expectation that low prices would prevail, and are probably amply secured against loss should the pessimist's predictions transpire. The large crop, although the prices may be low, will enable planters to more than pay out, in which they will be largely aided by the increased corn crop, which will prevent the necessity of purchasing supplies, for which they have heretofore paid actual cash or mortgaged their crops to secure advances. I am persuaded therefore in looking over the condition of the South, and with the return of confidence, which is exhibited on all sides, that the outlook for this section is altogether promising. The people of the North, as a rule, have had mistaken ideas of their Southern brethren and of the Southern climate, but they are daily learning more of both, and the result is satisfactory to a degree that must prove mutually beneficial.

C. W. RUTH, President.

Best Crops for Years

FIRST NATIONAL BANK,
PALESTINE, TEXAS, August 29, 1891.

We are beginning to feel some relief from the money stringency which has been pressing the country, both in Europe and America. We of the South are possibly in a better position to receive immediate relief than any other part of the country. Especially Texas has a bright prospect ahead, and that very near by. We have harvested the best crop of small grain we

ever had in the State; our corn is the best for years, and our crop of cotton, which is just beginning to move, is unusually large. The price of the latter is improving, having advanced considerably lately, and the prospects are for better price and better quality. Our cattle interest has brought Texas a great deal of money this year, and we expect a great deal more from this source within the next 90 days. During the next six months the tide of money will be this way, and we expect easy money matters in the spring. Our planters are generally in good shape, and we expect to forge to the front in 1892.

GEORGE A. WRIGHT, Prest.

A Very Prosperous Georgia City.
THE NATIONAL BANK OF COLUMBUS,
COLUMBUS, GA., August 31, 1891.

The banks of Columbus are well supplied with funds to move the cotton crop and to meet the needs of their customers. Our community has never entered into speculative ventures, and in consequence has not been crippled by them. The outlook for fall trade is promising on account of the recent advance in cotton. It is generally conceded that the crops of cotton in this vicinity are from 20 to 25 per cent. off from last year's. The continued development of the northern and eastern suburbs of this city by home capital is worthy of note. A \$60,000 electric railway is now under construction connecting the romantic and elevated river scenery of the North Highlands with the city proper. The government has just selected a site for our \$100,000 public building, which will soon be in course of erection. The five-story brick and stone building of the Columbus Investment Co. has been located. Other solid enterprises are projected, and the new dwellings throughout the city and suburbs in various stages of completion bespeak the substantial growth of the city's population. Our business streets have no empty stores, which is worthy of very favorable comment. Unless Congress should give us a setback by the coinage of silver in unlimited amount I believe that for six years to come at least all legitimate business which is intelligently managed will prosper.

WILLIAM SLADE, Asst. Cashier.

The Future Bright With Promise.

MERCHANTS & MINERS' BANK,
TALLAPOOSA, GA., August 28, 1891.

There are so many points to be considered in answering fully your question regarding the prosperity of the South that it would take a great deal of time and space to go into the matter as fully as justice would require. I can speak only for Georgia, and in this respect would say that we seem to be enjoying unusual prosperity, and the outlook for the future was never brighter. Our city in particular is enjoying a splendid and healthy growth, and it only needs an examination of the city tax returns for this year to show that we are meeting with an unusual degree of prosperity. The large manufacturing industries that are building here are an evidence that Georgia's resources are unquestioned. The fact that these industries are taken from the heart of the great State of New York, and moved here on account of the cheapness of raw material and the fact that the goods manufactured here, namely, carriages, stoves and chairs can be produced for about one-third what they can in the former community where they were located shows that business men and manufacturers no longer question the advantages offered by locating in the South. While these new industries will not be ready for operation before November, all of them have received large orders for goods in advance of the completion of their works. Regarding the business of this bank I will state that we were organized one year ago the 8th day of July. The loans and discounts at that time were \$9,000 and the deposits about \$26,000.

To-day the loans and discounts are \$155,000 and the deposits about \$130,000. We have been able to declare two semi-annual dividends of 5 per cent. each and 4 per cent. to the surplus. I regard the South as a section in which there will be in the very near future a tremendous development and a very large emigration which will be purely American in character. Almost all the portions for great development in the West and Pacific slope have been utilized, and as Chauncy M. Depew says "the South is to be the bonanza of the future." All that we ask is a personal examination of the wonderful resources of this section to convince the most skeptical that the climate and raw material are immensely in favor of the South. It is the place for the young man. It is the place for investment of capital, either in large or small amounts, and there are so many opportunities here for business, either in the mercantile or manufacturing line, that I find it impossible to go into details. Our crops have not failed in many years. The South has not felt the extreme stringency that has been experienced in money matters in the North. The great crop of cotton of 1890 brought into the Southern States something like \$320,000,000, and while various other places in the Union have been suffering from a failure of crops, they have been rejoicing in great prosperity in this respect. The future is bright with promise.

J. W. CASELDINE, Cashier.

Business Will Be Conservative.

COLUMBUS INSURANCE & BANKING CO.,
COLUMBUS, MISS., August 31, 1891.

Think we have realized the worst of present year. Money market stringent all the year and summer business showed but little elasticity. Indications point to improved trade this fall, which, however, will be conservative, controlled by promised yield of cotton crop, which is still a matter of conjecture, as injury has been done by the army worm, which continues, though in some less degree. It is the opinion of many that the cotton crop will range from 10 to 15 per cent. less than last year, while the corn crop will be from 20 to 25 per cent. better. Real estate has been steady all along, and while we look for no decided improvement, we feel confident that present values will be maintained.

J. M. BILLUPS, President.

Better Condition Than for Years.

FIRST NATIONAL BANK,
CENTREVILLE, TENN., August 31, 1891.

Middle Tennessee is reasonably prosperous. Our county (Hickman) and the adjacent counties will be in better condition this fall than for years. There are a few croakers trying to legislate and talk legislation for special classes. The great majority of our people, however, like the honest men they are, repudiate the assertions that they are in straitened circumstances. Our rich ore beds and virgin forests are inviting fields to capital.

J. B. WALKER, Cashier.

Farmers Out of Debt—Mississippi in a Solid Financial Condition.

COMMERCIAL BANK,
BROOKHAVEN, MISS., August 31, 1891.

I am glad to be able to report a healthy financial condition in this section. Our farmers have never been in a more prosperous condition since the war, as the favorable crops, with good prices for the past few years, wiped out, you may say, all the old balances, and our farmers started this season out of debt and calculating on low prices for their products. The low price of cotton of course hurts some, but we are able to stand it, as it is offset by larger crops of corn, oats, sugarcane and vegetables, and we have every reason to believe we will have a large cotton crop in this vicinity. Our farmers have not looked forward for a big price this year for their products, and did not go in debt with the idea of selling their crop for a high price. Cotton is coming in

freely, and every indication points to a bright and early fall. We appreciate the interest you are taking in this matter, and assure you that if the balance of the Southern States are in as prosperous a condition as this section Southern investments will prove profitable.

F. F. BECKER, Cashier.

Business Improving.

FRANKLIN COUNTY COMMERCIAL CLUB,
WINCHESTER, TENN., Sept. 1, 1891.

The financial condition of this locality has materially improved since the wheat crop has been put on the market. A good many farmers sold their crops at \$1, and the yield was more than an average. Corn promises a fine yield also. The fruit crop is quite good, and the surplus apples and peaches are going into brandy. Money is more plentiful here than usual. Our bank business has improved 20 per cent. since last year.

G. G. PHILLIPS, Cashier.

A Most Healthy Financial Condition.

POTTERS' BANK,

BOWLING GREEN, KY., August 31, 1891.

In our opinion, this section of Kentucky is in a most healthful state. Our wheat crop was very fine, and now selling at good prices, while our fruit crop is seldom better than this year. The recent rains have improved our corn crop so much that we feel safe in saying we will at least have an average crop of corn. Considerable tobacco has been planted, and now growing finely. In addition to our agricultural interests we have a large live stock market, and already buyers are coming to our place to purchase mules. Our fancy saddle and horse trade continues the year round. Fortunately for us and our friends, we have never had a "real boom" in property, and we feel safe in saying that our real estate will continue to be sold at reasonable prices. This section of Kentucky has stood the "hard times" quite well. We have had but few failures in any line.

P. J. POTTER & CO.

Abundant Prosperity.

THE FIRST NATIONAL BANK, ROME, GA.,
ROME, GA., August 31, 1891.

I am happy to have the opportunity to speak of the very fine condition of affairs in this section. Nature, realizing the universal depression, has seemingly selected this country as the one on which to pour out her rich and diversified treasures as an illustration of what a Christian nation may expect at the hand of Providence. While cotton has been low, and we have been expecting to have market at a low price, it now looks as if we will be rich even in cotton. Our cribs will be full of corn, in fact, will have to build new and larger ones. Southern people will have plenty to eat and wear of their own raising; the cotton crop will give us surplus money. Southern enterprises are not languishing; towns built for speculation may go down, but solid towns will go to greater usefulness. Our people have learned industry, economy and perseverance, all the qualities that go to make up the good citizen. In Rome our factories are all running on full time. The Cotton Tie Works run day and night. The Standard Scale Co. has recently been sold to Northern capitalists. The Stove Works, the plow factory, Cundell Furniture Co. and the cotton factory are all prosperous.

JNO. H. REYNOLDS.

Better Food Supplies Raised Than for 25 Years.

PORT GIBSON BANK,

PORT GIBSON, MISS., August 28, 1891.

The cotton crop of this county up to ten days ago was equal to that of last year, but the drouth and unprecedented cold weather has caused considerable shedding. I estimate the loss at 15 per cent. now, but with a favorable season from now on this loss will be reduced. The high price of meat and corn has made the actual necessities for making this crop come high, but I do not think that the accounts of the farmers are very much in excess of or-

inary years, as they have dispensed with much they could do without. The crop of corn is very fine. There will be less corn and meal brought to this section from the West than there has been any year since I have had anything to do with the planting interest, which extends over a period of 25 years. The low price of cotton has its depressing effect, but there never has been a time when the planting interest was in better condition for low-price cotton. I do not look for as light a money market in this section as there was last year, owing to the conservative manner in which all business has been conducted here this season. Banks have discounted very cautiously, keeping a good reserve fund on hand. I have considerable planting interest both here and in Bolivar county. Reports of crop in last-named county are excellent. The loan companies have done a very satisfactory business. Few defaults of interest, considering the amount of business done by them. I think this season will prove the solidity of Southern securities.

JAMES W. PERSON, Cashier.

HERE is what John M. Murphy, a New York newspaper man who has been in Florida for some time, tells the Atlanta Constitution:

"What are the prospects for the development of Florida?"

"Excellent. Never better. The State may now be said to have entered on a career of lasting prosperity. The travel this winter is expected to exceed any heretofore known; capital is pouring in from many directions, and the fruit crop of the State promises to be both large and profitable."

"What are the prospects of the phosphate industry?"

"Very bright. That industry is in embryo yet, but judging from reports given me by several persons who make a specialty of the subject, the phosphate mines of the State will soon be as numerous as the placer mines of California, and more generally profitable. New fields are being discovered daily, and where deposits were least expected. Parties are now in Europe negotiating for the establishment of new lines of steamers between every deep-water port in Florida and Great Britain and Germany, and experts say that fleets of phosphate steamers will leave within two years as regularly as the mail steamers of the Plant line."

All the indications point to tremendous activity in Florida this fall and winter.

Developing Alabama's Coal Trade.

Mr. J. R. Ryan, of the Virginia & Alabama Coal Co., of Birmingham, Ala., says that his company has succeeded in establishing Alabama coal upon a firm basis, supplies the Georgia Pacific and other railroads, moves the coal from the mines on its own cars, and now proposes to make a bid for the entire Southern trade. It is now building a hundred barges at a cost of \$133,000, and will run its coal into Greenville via the Georgia Pacific and then float the coal down the Mississippi in barges. The cost to reach New Orleans will be as great as an all-rail haul, but the idea is to supply the plantations and industries along the river which are not accessible to railroad transportation. These places consume 500,000 tons of coal annually. It is proposed to reach out after all other Southern sections, the Alabama industry having the advantage all through the South in the matter of distance and of rates. Mr. Ryan's company has one contract, that of the Georgia Pacific, which calls for 275,000 tons a year.—N. Y. Coal Trade Journal.

FLORIDA PHOSPHATES.

New Plants Started Up—Others To Be Erected—New Companies Formed—Confusing Names—The Hard Rock District—Phosphate Shipments.

[Special Cor. MANUFACTURERS' RECORD.]

BARTOW, FLA., Sept. 5, 1891.

Two more plants have been completed and put into operation in the pebble district, adding materially to the volume of phosphate flowing out of the Peace river country. Both plants are in Polk county.

THE VIRGINIA-FLORIDA PHOSPHATE CO., located at Wilnot, on the Florida Southern Railroad, started up last week, all its machinery working perfectly, and 100 tons of phosphate per day are now being taken out and washed, dried and screened, ready for shipment.

THE NATIONAL PEACE RIVER CO.

at Jan-jay, also on the Florida Southern, made its initial run on the 28th ult., and in two hours took out 26 tons of clean pebble. The National has a well-appointed plant and a rich deposit to work. It is reported that a big premium was offered for stock in this company before a ton of pebble was mined.

THE GREATEST ACTIVITY PREVAILS

at the several new mines now erecting plants. The Bartow Phosphate Co., the United States Co., the Gulf Mining & Manufacturing Co., the Standard Peace River and the Phosphoria Co. are all pushing the work on their plants with the greatest rapidity.

THE TERRACEA PHOSPHATE CO.,

whose purchase of land in Polk county was noted in the MANUFACTURERS' RECORD some months ago, will begin the erection of a 200-ton plant next week. This company owns 400 acres of excellent pebble land about 7 miles west of Bartow, and it is on this tract that the plant will be erected. The company also owns a valuable deposit on Terracea bay, which, it is said, will soon be developed.

The plant of the United States Phosphate Co., at Fort Meade, is to cost \$25,000 and will have a daily capacity of 100 tons. J. S. Hanahan is the manager.

NEW COMPANIES FORMED.

The Boulder Phosphate Co., of Ocala, and the Pasco County Phosphate Co., headquarters of the latter being at Chicago, are among the new companies recently organized. The Florida Phosphate Co., organized by Oscar Mitchell and others, capital \$1,000,000, and the Standard Pebble Phosphate Co., of Orlando, organized with \$50,000 capital to work mines in Polk county, are also to be added to the list of new companies.

CONFUSING NAMES.

It is unfortunate that our new companies do not consult the records before selecting names by which they are to be legally and commercially known. We now have a Standard Peace River Phosphate Co. and a Standard Pebble Phosphate Co., but what is much more confusing, two companies have been formed under the name of the Florida Phosphate Co. since the organization of the Florida Phosphate Co., Limited, at Phosphoria. This duplication of names may lead to embarrassing complications in the future, and ought to be studiously avoided.

THE HARD ROCK DISTRICT.

A special correspondent of the Courier-Informant reports unusual activity in the hard rock district around Anthony. "Lands are freely changing hands, and new companies are being organized. Land owners who find the slightest evidence of phosphate on their premises are having them pitted for the inspection of buyers, many of whom are in the field."

THREE COMPANIES ARE OPERATING in this district, to wit, the Peninsular Co.

with a plant near Anthony and a duplicate one near Sparr, the Deacon Co., at Anthony, and the Plate Rock Co., two miles north of Sparr. The Stranathan Co. is almost ready to begin work. The Peninsular Co. has changed hands, M. Twellier, of Paris, representing several French companies, being the purchaser. Sale includes both plants, with 1,000 acres of land. The price paid was about \$200,000. The company had shipped up to the time of sale 3,000 tons of high-grade rock to London. The Deacon Co. has mined 1,500 tons, but has thus far confined its work to grinding for local use. The Plate Rock Co. has only been running about two weeks, and has 400 tons ready for shipment.

AN IMPORTANT TRANSACTION

in Hillsboro county pebble phosphate was consummated last week. The Tampa Real Estate Exchange, S. B. Turman, manager, sold 470 acres for \$33,000 to Mr. H. N. Mann, of Chicago. Col. J. N. Hooker and Mr. E. E. Skipper, of Bartow, were equally interested with Mr. Turman in the property.

THE MOVEMENT OF PHOSPHATE.

A special report to the Courier-Informant, prepared by Mr. T. W. Roby, auditor of the Florida Central & Peninsular Railroad, shows that up to July 1st, 1891, this road had transported 51,078 tons of phosphate. Of this amount 35,501 tons were delivered at Fernandina, whence it was sent by ocean steamers to seaboard cities of this country and to European ports, and at River Junction 11,048 tons were delivered to other lines radiating to the north, east and west, the balance of the total amount having passed out via Jacksonville, Lake City and Callahan.

The first shipment over this company's lines was made in November, 1889, but it only amounted to 13 tons, and the whole amount shipped that year was only 28 tons. The whole amount handled in 1890 was only 18,033 tons, while the shipments for the first half of the present year amount to 33,017 tons; and these figures will doubtless be largely exceeded by shipments during the last half of the year.

JAY SHRADER.

The Scramble for Houses at Newport News.

There is a great rush for houses at Newport News. The scramble is indeed wonderful. The Sun says: "We are apt," said a gentleman to a Sun reporter, "to be somewhat intemperate in our statements concerning what ought to be done in a growing city. We all want to see things move along as rapidly as possible, but it isn't wise to crowd them. It is true that we need houses, and need them badly, but when we think that Newport News has only been growing a few years, and that now we have a population of 7,000 people, it will be seen that we have outdistanced most of our competitors. But we should have more houses; there is a pressing demand for them. I have no doubt that 200 good dwellings could be rented inside of a week."—Richmond (Va.) State.

LAWRENCEBURG, TENN., August 31, 1891.

Editor Manufacturers' Record:

Lawrenceburg is probably doing better to-day than any town in this part of the South. Water works are being put in and several new manufacturing enterprises are being located. We want an engine of from 100 to 200 horse-power, and about 300 or 400 feet of line shafting, with which to furnish power to small industries. This power we will lease to small industries which will put up their plants contiguous to the main shaft. For this engine we will exchange real estate, the best we have, at very reasonable prices. Proposals for the engine should be addressed to the secretary of the company, to whom, also, applications for power should be addressed. See the company's advertisement on another page.

GENERAL NOTES.

NORTH CAROLINA is the State of all others for rare minerals. The preface of Bulletin 74 of the United States Geological Survey says that since 1881 "a goodly number of species has been added to the lists," and that minerals formerly supposed to be rare are now found abundantly and have acquired commercial importance. "For example, in response to an industrial demand, North Carolina has supplied zircon and menagite by the ton, and samarskite by the hundred weight, and the output can be increased almost indefinitely. The State has also contributed to science several new specimens as yet not found elsewhere, and some of these, notably among the vermiculites, are significant for the light they shed upon other associated minerals." The commercial demand referred to comes from the manufacturers of the Welsbach light. This invention consists in saturating a fine film of silk with a solution of these minerals. This is placed over the flame of a common Argand lamp, the heat from which destroys the silk, but leaves the mineral net work intact. The peculiar quality of these minerals is that they absorb certain of the colored rays, and give a pure, bright, white light, like that of the sun. Since the Welsbach lamp has been introduced in London it has displaced all other illuminators for the use of chemists and microscopists, for it is more steady and reliable than any other, bright daylight not excepted. The one trouble thus far has been that the film would not bear transportation, but recently the manufacturers think they have overcome this by incasing it in solidified petroleum. When the film, thus protected is put in position, the flame quickly burns away the coating as well as the silk. Should this prove to be practicable, then the demand for these minerals will draw heavily on North Carolina's great supply.

THE Southern Pine Fibre Co., of Philadelphia, Pa., which decided early this summer to build its plant at Augusta, Ga., has done some unusually expeditious work. Ground was broken for its fibre mill July 27, and the mill was finished August 22. This structure is of brick, laid in cement, two stories high, 110 feet long by 50 feet wide. The boiler-house, of the same materials, is a one-story building 25x30 feet, with a chimney 65 feet high. The company has all its machinery finished, and expects to put it in place as soon as the Richmond & Danville Railroad Co. has completed the tracks to its doors, which will probably be done within two or three weeks. Operations will commence within 30 days after the tracks are laid. The building of the soap factory will begin early next January.

CHARLESTON, S. C., stands well to the front among Southern cities, as the result of last year's work. In making its usual annual review the News and Courier of that city publishes figures that will astound those who still rest under the delusion that the great earthquake of 1886 destroyed forever the prosperity of that historic place. Some of the largest figures are as follows: The commerce and trade for the year ending August 31st, 1891, amounted to \$98,554,718, a net increase in 12 months of \$17,935,001, and a net gain during the five years since the earthquake of \$31,606,166. This has been an increase of somewhat more than \$6,000,000 annually for that period. The number of bales of cotton exceeded by 207,916 that of the previous year, and the value of the cotton trade of the port was greater by \$9,433,000. The total value of phosphate rock, crude and ground, sold was \$4,298,400, an increase for the year of \$288,000. The commercial fertilizer trade amounted to \$5,869,525, a

gain of \$374,875. The value of manufactured products, exclusive of fertilizers, was \$11,611,500, an increase of \$2,083,621, and the city's mercantile business, wholesale and retail, reached the large sum of \$41,840,000, a gain of \$5,020,000. The value of the rice sold was \$1,314,855, and the trade in lumber and cross ties amounted to \$673,595. These, with numerous other statistics given in the review, fully justify the News and Courier in saying that "the development in the transportation facilities of the city, the new railroads which have been added to the lines contributing to the trade of Charleston, the great improvements made in our terminal facilities, the gradually deepening water on the bar, and the new life tingling through every nerve of our commercial body, afford the richest promise for the future."

THE Southwestern Transportation Co., of New Orleans, was organized by capitalists of that city in November, 1888. It began business with one towboat and six barges. It now has a capital of \$50,000 and owns two first-class towboats and 13 model barges, which have a carrying capacity of 10,000 tons. During the past year this company has handled 70,000 tons of freight and 4,000,000 feet of lumber. The New Orleans States says that this company is now prepared to do a general towing business, and will put in bids for all work of that character. The officers are: President, A. C. Landry; vice-president, M. Schneidan; secretary, M. Landry. During spring freshets the steamers of this company are employed in towing barges of coal from the Mississippi river to various places on Bayou Teche, the Atchafalaya river and other adjacent streams.

THE Morristown & Cumberland Gap Railroad, an important link in the system of railways traversing the mineral and timber districts west of the Appalachian chain of mountains, will be completed within the next 60 days. The Knoxville Tribune, describing its route, says: "It passes through the beautiful Richland and Beans Station valleys parallel with the main chain of the Clinch mountain, and the scenery along the entire route is of a grand and picturesque nature." This road, when completed, will give the South, and especially the Carolinas, another outlet to the West. It will be of an advantage to Middlesborough that cannot be overrated. It will benefit every iron, coal, timber and marble property along its route, and will furnish long-needed connections between Southern seaboard and interior cities and the developing mountain districts of Eastern Tennessee and Kentucky. The country this new road will traverse is rich in mineral and agricultural lands that will be rapidly developed by it.

THE great increase of the tax valuation of Georgia last year was the subject of much comment throughout the country. The total then given was \$378,366,784, a gain over the preceding year of \$31,427,947. This year the excess over 1890 is \$25,146,580, making a total gain in two years of \$56,574,527. This is a wonderful record of increase in material wealth. To the gain this year Fulton county, in which Atlanta is situated, contributed \$6,279,624, or more than 11 per cent. of the State's aggregate increase. This was but a little more than the advance in value of the improved lands of the State, which amounted to \$6,212,114. The industrial progress of the State is indicated by a gain in the output of the cotton mills of \$1,889,704, in iron works products of \$415,025, and in the value of plantation and mechanical tools of \$740,046. The surplus of cotton and corn on hand April 1 was \$1,983,241, an excess over the same date in 1890 of \$1,151,370. This last item corroborates statements heretofore made of

the growing prosperity of Georgia's agriculturalists.

THE first tobacco sales warehouse ever established in South Carolina will be opened at Florence, October 1st, by R. A. Croxton, of Danville, Va. This warehouse, which is already finished, is fitted up with the latest appliances and is well lighted and ventilated. A large number of buyers will attend the opening to see what South Carolina's farmers can do in tobacco cultivation. This opening will mark the beginning of a new era in the agriculture and business of central South Carolina.

REPORTS have been current for several months that a large number of German families were to be colonized in Alabama. The Birmingham News published last week a dispatch from St. Louis stating that a German syndicate, composed of bankers, members of the Reichstag and noblemen, had purchased a large body of land in Washington county, Ala., on which in time at least 1,000 families from the Rhine districts would be located. The first party of emigrants are expected to arrive next January.

NEXT week, Tuesday, a convention will assemble at Atlanta, Ga., composed of delegates from all Southern State organizations "interested in the cultivation of cotton, its manufacture and sale." The chief topic for consideration is to be "a reduction of acreage in the cotton crop." The call for this convention says: "We expect every agricultural State organization to send delegates, colored as well as white. Every question connected with the cotton crop of the South will be under discussion." It is probable that this convention will be attended by a large number of delegates.

THE first convention of Jersey cattle breeders ever held in Texas assembled recently at Fort Worth. It was determined to form a permanent association for the advancement of this interest in the State, and a committee was appointed to formulate a constitution and by-laws, and to report the same at a meeting of the association, which will be held at Dallas October 22, at which time and place the Texas State fair will be at its height. The rapid increase in population and in the number of Texas cities and towns has created a large demand for first-class dairy products, out of which has grown another for Jersey cattle, for the successful breeding of which the soil and climate of Texas are said to be well adapted.

BEFORE 1861 Mobile, Ala., was known throughout the North, in Great Britain and in the chief commercial cities of the Continent as one of the chief cotton ports of the South. Although her merchants did much in other lines, that was the leading; in fact, the dominating business that dwarfed all others. Since 1865 great changes have occurred at Mobile. Now that city is the center of a domestic and foreign trade in which cotton is no longer the king, but merely one of the largest factors of that city's prosperity. The first break in the domination of cotton was made by the lumber interest. How great that has become is shown by the statistics of the cotton year that ended the last of August. During the 12 months Mobile exported 1,613,734 feet hewn timber, value of which was \$220,536; 1,919,190 feet sawn timber, valued at \$257,695, a total of \$478,231, which was a large increase over 1890. But another new element of Mobile's trade was her central relation to the fertile lands surrounding her that have been turned into vegetable and small fruit farms and have made that city one of the centers from which the Ohio Valley cities and many others obtain their earliest supplies. From small beginnings this business has grown to such proportions that the prices of suit-

able lands for it in the neighborhood of the city have advanced a thousandfold. The shipments of vegetables alone from this city the past season have amounted to a value of \$267,808, while from railroad stations within a few miles of and tributary to it shipments nearly as large have been made. During the past season Mobile exported 53,204 bales of cotton, of which 52,664 bales went to Liverpool. Another important trade is the shipment of fish and oysters, which for the season of 1890-91 has amounted to \$230,000, an increase over the preceding year of \$40,000. The Booth Packing Co., which does an immense business in the Northwestern States, will commence shipping from Mobile next fall, and will add largely to this profitable trade. The coal business is assuming large proportions, and will, as new relations are established with Central American ports, become one of the leading exports of the city. During the past year Mobile received 51,267 tons of Alabama coal and 1,775 tons from other sources. This business is in its infancy, and is certain to grow into large proportions. The best evidence of the increase of general trade in any place is furnished by its postal statistics. In these Mobile has made a great advance. In 1889 '90 the amount paid for stamps, postal cards and notes, etc., was \$46,806, and for the corresponding period this year \$51,406. Every statistic of the export, import and domestic trade of Mobile is in keeping with the foregoing, showing that that city is moving forward steadily.

THE increase of domestic traffic at Southern seaports is one of the noteworthy signs of the growth of the interior. In every review of last year's trade thus far published this fact stands out prominently. In none is it more apparent than in that which appeared the first of this month in the New Orleans Times-Democrat. Its synopsis shows that the receipts of domestic produce by river, rail and canal for the year just ended amounted to \$208,935,400, as against \$193,147,121 the previous year, a gain of \$15,788,279 for that period, and for two years of \$30,230,779, or 30 per cent. This, says the Times Democrat, "is an encouraging showing when the low prices of products are taken into consideration." There has also been a considerable increase in exports and imports at that port, the first amounting to \$728,143, and the second to \$6,695,807. This last may be taken as a proof that New Orleans is getting a larger share than ever before of the jobbing trade of the Mississippi delta, and of the districts which her merchants reach by the railroads centering there. The improvement in the coastwise trade is also worth noticing. In 1889-'90 this amounted to a tonnage of 407,035 tons, while for the year just closed it was 528,667 tons, a gain of 121,632 tons. Other figures show the increase of railway traffic. In 1872-'73 the amount of freight handled at New Orleans by railroads centering there was but 464,240 tons, while for the year ending August 31 it was 3,555,742 tons. In these 18 years the railroad business of New Orleans has increased eight fold. The total commerce of the city for the year was as follows: Receipts of domestic produce and by ocean were 4,775,970 tons, valued at \$296,443,517. Total shipments to the interior and by coastwise and foreign exports were 3,753,676 tons, valued at \$286,150,279. The aggregate of receipts and shipments amounted to 8,529,646 tons, valued at \$589,593,796. After giving these figures the Times-Democrat says: "A commerce of nearly \$600,000,000 and over 8,000,000 tons a year is one to be appreciated. It places New Orleans among the dozen leading ports of the world. * * * Taking the total business done here, New Orleans ranks among the greatest cities of com-

merce in either hemisphere, and the outlook for the future is still more reassuring and encouraging." New Orleans is fast getting to be a manufacturing city, as is shown by the census tables for three succeeding decades, as follows:

Number of establishments.....	1850.	1880.	1870.
Capital.....	2,157	915	554
Wages.....	\$22,865,000	\$9,565,393	\$5,429,140
Products.....	24,560	8,404	4,411
	\$5,734,260	\$3,717,557	\$1,294,254
	\$50,000,000	\$18,858,909	\$9,451,439

The large increase above shown is due in part to the fact that the State's constitution exempts until 1899 all capital and machinery employed in manufactures from taxes or licenses, and in part to the city's situation that enables to secure raw materials from all sources at a minimum of cost.

THE truck season at Newberne, N. C., has been this year a source of great profit to all concerned. The product has been enormous, demonstrating the fertility of the soil of the Neuse and Trent river valleys and the skill of the farmers cultivating it. The railroad running from Morehead to Goldsboro has frequently been compelled to run two extra trains a day, with from 3,000 to 4,000 boxes of truck on each train, while the steamer Neuse has made three weekly trips and the steamer Newberne two, to accommodate shippers. Seventy trains have taken 210,000 packages and the two steamers 140,000, a total of 350,000 crates and barrels of truck sent to Northern markets. These contained kale, radishes, green peas, asparagus, cabbages, Irish potatoes, beans, beets, turnips, tomatoes, cucumbers, egg plants and strawberries. The amount netted from these products will run up to nearly half a million dollars, their gross value having been about \$750,000. But that is not all. On the land from which these crops were gathered, strawberry beds excepted, other crops have been planted that will mature before frosty weather comes, for in that genial climate two crops in a season is the general rule for all thrifty truck farmers.

THE proposed extension of the Roanoke & Southern Railroad from Winston-Salem to some railroad junction south of North Carolina's "twin cities" has stimulated a healthy rivalry between several wide-awake places to secure the coveted prize. Charlotte is one of the competitors and means to get it if possible. To accomplish this her leading business men met at the courthouse last week and discussed the advantages to be derived from having this competing line terminate at that city. The unanimous sentiment was that the people of Charlotte were ready to consider a business proposition from the Roanoke & Southern management, and a resolution was adopted for the appointment of a committee of 15 citizens, who should attend the next meeting of the stockholders of that railroad company and use their best efforts to secure the extension of the road to Charlotte. Another committee was appointed to secure the right of way in the territory through which the road must be built.

THE Gulf Phosphate Mining & Manufacturing Co., whose stockholders are Charleston (S. C.) capitalists, owns by purchase a large territory on Peace river, Fla., and has built an extensive plant at Cleveland, which is to be the center of its operations. It has also made a contract with the State phosphate commission by which it has obtained the exclusive right for five years to take phosphates from a stretch of that river's bed, where there are said to be large and valuable deposits of pebble rock. Cleveland is at the junction of Peace river and Charlotte harbor, on the Florida Southern Railroad, four miles from Punta Gorda. The daily product of the company will be 200 tons. E. L. Roche, of Charleston, for many years special supervisor of South Carolina's phosphate interests, is the company's superintendent.

NEWPORT NEWS SHIP-YARD.

The Magnitude of a Great Enterprise.

NEWPORT NEWS, VA., Sept. 1, 1891.

For the first time since 1862 your correspondent has visited Newport News. Then it was a vast level plain, stretching from the shores of the James river back into the interior, and covered for the most part with forests, interspersed with clearings. Now all the land has been cleared, the stumps blown out with dynamite, broad avenues have been graded, many houses, shops and stores built, and many more are under construction. On one part of the water front are the steamboat wharf, the huge coal docks and the immense elevator of the Chesapeake & Ohio Railroad; at another is the splendid plant of the Newport News Shipbuilding and Dry Dock Co., where several thousand men are employed in building two immense steamships. This ship-yard contains 60 acres of land, and has water frontage of 1,825 feet, while the 15 buildings already there cover 5 acres. Extending to deep water are 4 piers of the following dimensions, respectively: No. 1, 60x900 feet; No. 2, 60x350 feet; No. 3, 80x350 feet; No. 4, 60x550 feet. There are an outfitting basin 900x500 feet and 8 shipways, two of which are respectively 400 feet long, two 450 feet long, and the remainder 500 feet long. The dry-dock has a top length of 600 feet, a top width of 130 feet, a bottom width of 50 feet, and an entrance width of 93 feet. The draught of water over the sill is 25 feet. It requires but an hour and a half to pump the water out of this vast receptacle. Of the shops, the larger are the machine, the boiler and the blacksmith, the first two of iron and brick, the latter of brick only. Their dimensions, 100x300 feet, are the same. The first two are supplied with hydraulic travelling cranes of 40 tons capacity, and the machinery in all the shops and the appliances in the yard are of the latest and most approved kinds, many of them of novel design, and are capable of handling the largest work known in shipbuilding, and for doing it with dispatch and economy. There are many derricks for light and heavy work, one especially having capacity for lifting 130 tons, making it possible to put an entire engine aboard a vessel at a single lift.

A marine railway over which a 2,000-ton vessel can be hauled and many other powerful adjuncts will, when all are finished, perfect this plant, which will (and does now for that matter) surpass in magnitude and equipment any ship-building establishment in the world.

While the above figures may convey some faint idea of the magnitude of this plant, no one can from them form any adequate conception of the work that is in progress in all its departments, or of the stimulating scene that is spread before the visitor's eyes when permitted to enter the yard. Days could be occupied in studying the vast variety of detail attendant upon the building of a modern iron or steel steamship. One passing through the store-rooms of the office (a three-story brick building 40x200 feet) would imagine himself in a wholesale hardware store, so great is the variety and so large the stock on hand, all arranged with due regard to economy of space and facility of handling, and everything scrupulously clean. Leaving the office, the visitor sees to the right the iron and brick bending shop, 60x127 feet, open at all sides to the breeze. At one end is a huge "burning, fiery furnace," at whose mouth a tall muscular negro is standing fastening a pair of pincers, some six or eight feet long, to the end of a plate of steel that has passed under the bending machine and then been thrust into the fire. It is a terrible place, for none but a salamander could endure that fierce heat for more than a second; but the pincer man is

equal to the task and gets a firm hold on the plate, while a gang of a dozen stout fellows of his race, having attached a strong rope to the handle of the pincers, start off with a shout upon a run and draw the long, heavy piece of bent steel to a place on the perforated iron floor fully 30 feet away. They drop the rope, remove the pincers, and then each man picks up a long steel bolt with a hooked end and drops it into one of the square holes in the floor so dexterously that the hook rests upon the flat surface of the steel glowing at a white heat. The pins all in place, every negro seizes a sledge, poises himself for an instant, then strikes a surely aimed lusty blow on the curved bolt head and quickly retreats. This is continued until the plate is held firmly in place against the iron floor. These men take immense wooden sledges, and, passing along the rear of the plate, with swinging strokes upon its upturned edge, bring the whole to a level. It is hit and retreat until the work is done. In no army or navy can there be seen a finer illustration of what well directed discipline can accomplish. Every one of these brawny negroes knows exactly what to do and when to do it. No word of command is passed; it is as though all these swarthy Vulcans were so many automatons moved by an invisible agency. After seeing this the looker on is prepared for the spectacle presented in the greater and lesser shops, where several hundred white men and black are working industriously and harmoniously together at forges, at presses, at drills and at all kinds of ponderous or perplexing machines.

To attempt to name all the objects of interest in this vast establishment, or to describe even a few, would consume more space than the MANUFACTURERS' RECORD could spare. That this vast hive of industry will attract tens of thousands of visitors in the coming years is beyond question, and as the mammoth steamships built here shall go to the ports of the world laden with the products of American farms, factories and mines, they will carry to every land the fame of this wondrous ship-building plant and of C. P. Huntington, its enterprising founder.

Among the shipping at the piers of this yard was one of the patent "whalebacks," invented by Capt. Alex. McDougall, of Buffalo. A queer-looking craft she was, as compared with the steamers of shapely outline that were afloat near by, but these peculiar looking barges must have been proven serviceable, or capitalists like Colgate Hoyt and John A. Rockefeller, of New York, would not have taken stock in the American Steel Barge Co. and have invested half a million dollars in a ship-yard for their construction.

The value of the great dry-dock here to American commerce has a present demonstration. The steamship El Dorado, of the Morgan Line, came in last Friday for repairs made necessary by her encounter with some jagged rocks off the Mantanilla bank in the Bahamas which were not laid down on the charts. This good ship will soon be restored to her normal condition of staunchness, and start off for New York to take another cargo aboard and assume once more her place in the line.

The mammoth grain elevator here is one of the largest in the world. It has a capacity of 1,500,000 bushels, and is provided with every adjunct for receiving and delivering grain with economy and dispatch. From a gentleman at the office I learned that they had every reason to expect a continuous demand for the full measure of their capacity from the shipments brought from the West by the Chesapeake & Ohio Railroad. From the manifests at the custom-house, Col. Clay, the collector of the port, ascertained that during August an aggregate of about 220,000 bushels of wheat had

been shipped. His expectations of the season's grain business corresponded with those of the elevator people.

It requires but a brief stay at Newport News to ascertain that the guiding brain and governing hand that originated and is effecting the splendid transformation here belong to C. B. Orcutt, president of the Newport News Shipbuilding & Dry Dock Co. and of the Old Dominion Land Co. From his office at No. 1 Broadway, New York, he exercises a constant supervision over the affairs of both corporations, while his trusted lieutenants carry out his orders to the letter and make regular reports of progress. It is his power to grasp large affairs, and to keep all their parts in regular and harmonious action, that enables him to direct wisely and successfully the immense interests centering at Newport News.

A RAILROAD is to be built in Bedford county, Pa., from a station on the Bedford division of the Pennsylvania Railroad, called Mann's Choice, to Brooks Mills, in Blair county, on the Morrison Cove division of the same road. The Pittsburg Post says that this will shorten the line between Bedford and that city by 50 miles, and that the primary object of its projectors is to provide an outlet for the vast coal fields of Virginia towards the East. The contract for everything except the rolling stock has been let to Colonel Hobart, of Vermont, one of the largest railroad builders in the country. This is doubtless a part of the system that will be completed when the Northern extension of the West Virginia Central has been finished. The present Southern terminus of that road is at Elkins, in West Virginia. From there it is to be extended northerly to Fairmont, and, after crossing West Fork river, it will be built along the west bank of the Monongahela and across the country to a point in the vicinity of Fairchance, where it will make its connection with the Pennsylvania system. The Lonaconing Review states that three corps of engineers employed by the same company have started from Elkins, and are pushing their way almost directly south through the counties of Webster, Pocahontas, Greenbrier and Monroe, making a route through the Alleghany mountains to the coal and iron fields of Eastern Virginia. It is hoped to intersect the Chesapeake & Ohio near Goshen, Va., and the roadway be driven even further. With the tidewater outlet at the east and Pittsburg as a commercial center at the West, the road will have loads for its cars both ways; coal East and merchandise West, with iron and coal from the South to carry in both directions. One of the beauties of the entire plan is the fact that the people who build the roads will own most of the land to be developed.

THE success of Leary in rafting logs from the Bay of Fundy to New York harbor has induced a Louisiana and Texas firm to make the attempt to tow a raft of yellow pine from Galveston to London. Mr. Chas. H. Moore, of Galveston, and of the firm of Lock, Moore & Co., of West-lake, La., states that, after consultation with experienced sea captains, he is convinced that such an enterprise would be attended with less risks than Mr. Leary accepted. His plan is to build a raft of logs in three sections, firmly spiked together, each section solidly lashed by cross pieces and spikes. Ponderous wire cables will be used for hawsers. This raft will be built in Galveston harbor and towed to London by a powerful tugboat and a tramp ocean steamer. The firm has a house in London, to which the raft will be consigned. Mr. Moore thinks it will take three months to construct the raft, and that it will be ready next July, at which time there will be the minimum of danger from heavy ocean gales.

FIRST GRAND

AUCTION SALE OF LOTS

AT

CENTRAL CITY, W.VA.

September 15th and 16th, 1891,

BY THE

HUNTINGTON & KENOVA LAND DEVELOPMENT COMPANY

Fine Residence and Business Lots

In the new and growing town of CENTRAL CITY, West Virginia, on September 15th and 16th, 1891, offered at auction. The lots will be sold at auction to the highest bidder without reserve.

NO PRICES FIXED NOR LIMIT PUT ON THE LOTS.

Central City is almost equi-distant from Pittsburg and Cincinnati, and has a front on the Ohio river of two miles, affording deep water for boats and barges that do the carrying trade on this stream, and giving ample room for coal tipples, elevators and wharves along its banks.

These lots are beautifully located, are well drained and adjoining the city of Huntington, fronting on streets 60 feet in width, with alleys 20 feet wide in rear.

The city of Huntington now has 12,500 inhabitants with manufacturing industries

EMPLOYING 2,500 MEN.

It is lighted by electricity, has two lines of street railroad, water works and all the comforts and conveniences of a first-class city. Her public schools are of the very best, having fine large buildings which cost nearly \$100,000.

MARSHALL COLLEGE, the Largest Normal School in the State, is located here.

For church privileges she is unsurpassed, all of the different denominations are represented and have fine churches to worship in.

The Huntington & Big Sandy Railroad now runs its cars to CENTRAL CITY, and within twelve months will be completed to Kenova; the company will run cars every half hour, thus connecting CENTRAL CITY with Huntington. There is no better opportunity for the business man, no better opportunity for the speculator and a rare chance for the workingman to secure a cheap and desirable home in a rapidly growing town where property will double and treble in value in a short time.

MANUFACTURING INDUSTRIES

Now located at CENTRAL CITY and in process of erection will give employment to fully 1,000 persons and increase the population from 3,000 to 5,000 within the next twelve months.

AN ELEGANT LUNCH WILL BE SERVED ON DAY OF SALE ON THE GROUNDS
FREE TO ALL WHO ATTEND.

Free Transportation from Huntington to Central
City and Return

TERMS OF SALE:

One-Fourth Cash on Day of Sale, and Balance on a Credit of Six, Twelve
and Eighteen Months. Interest from Day of Sale.

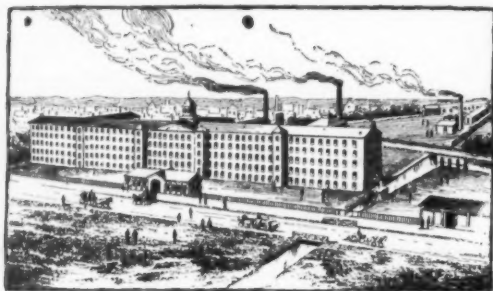
REDUCED RAILROAD RATES

Excursion tickets at half-fare rates for the round trip will be on sale at station of the Chesapeake & Ohio, the Ohio River, Norfolk & Western, the Newport News & Mississippi Valley Railways.

Descriptive Catalogues, Maps and other information furnished free on application to

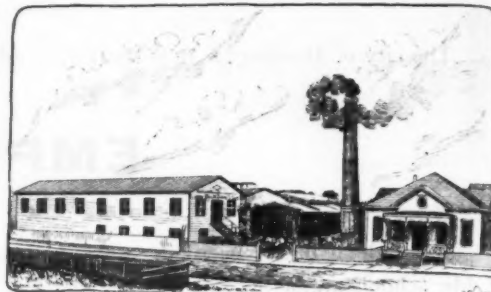
J. L CALDWELL, . . . General Manager,

HUNTINGTON, W. VA.



THE AUGUSTA COTTON FACTORY.

The "LOWELL OF THE SOUTH"
Augusta, Georgia,
 COMMENDS
 TO MANUFACTURERS



PERKINS LUMBER MFG. CO.

The AUGUSTA EXPOSITION,

November 2d to 28th, 1891.

AND CALLS ATTENTION TO THE FOLLOWING FACTS:

Augusta is the best point in the South at which to establish manufactures. She will be the HEADQUARTERS of Southern manufactures. She has long been the LARGEST COTTON MANUFACTURING CITY in the South, and will lead in the manufacture of other articles.

She is the best railroad and distributing point in the Southeast. She has the best map position of any Southern city, standing on trunk lines to the West and between the North and the extreme South, in access to the Atlantic ocean. She is at the HEAD OF STEAM NAVIGATION of the SAVANNAH RIVER, open to the sea, and is the best point relative to Northern, Western and Southern home, and South-eastern foreign, markets, lying in a Southern direction. Her railroad facilities are provided, and her river insures her low freight rates for all time; as, for instance, her rate on Eastern freights is 18 cents lower than either Macon's or Atlanta's, and only 2 cents more than Atlanta's on freights from the West.

Augusta is a rapidly growing city, though one of the oldest in

the South, and is equipped with every need and convenience of a great city. She has the finest canal water-power in the South, and much of this power is yet unused for day and night use. There are openings in Augusta at the present time for many million dollars of manufactures to supply the city and direct territorial trade alone, which manufactures are now being bought elsewhere. Notably are there openings for manufactories in hardwoods into all shapes, including, first, furniture; then wagons and carriages; farm implements and tools; barrels, buckets, trays, churns and dairy utensils and fruit crates. Candy and cracker manufactories are wanted; factories for making crockery from kaolin; tile and terra cotta; fire-brick from fire-brick clay; pressed brick, glass from superior sand, and manufactories of cotton mill supplies and agricultural implements. Canning factories are needed; tanneries, shoe, hosiery, clothing, hats and underwear factories, besides many others.

Augusta invites the establishment of large and small factories of all kinds.

FACTS ABOUT AUGUSTA.

Augusta's total debt is only \$1,744,800.
 Augusta has \$6,000,000 in cotton factories.
 Augusta's assessed value of property is \$21,300,000.
 Augusta's assets in canal and water works are \$2,000,000.
 Augusta has a permanent Exposition.
 Augusta's revenue from her canal is \$80,000 per annum.
 Augusta's increase in property from 1880 to 1890 was \$9,000,000.
 Augusta rents canal water-power cheaply at \$5.50 per horse-power per annum.
 Augusta has seven banks, with a capital of \$2,700,000.
 Augusta's tributary population is 1,000,000.
 Augusta's number of new buildings erected in 1890 was 600.
 Augusta has one of the best public school systems to be found in the South anywhere.
 Augusta's cotton receipts will number this year 275,000 bales.
 Augusta is the largest cotton manufacturing city in the South.
 Augusta's factories use 80,000 bales of cotton yearly.
 Augusta has 23 miles of electric railway, with two more lines building.
 Augusta has one permanent Carnival Association, holding in January of every year, and drawing this year 70,000 visitors.
 Augusta has seven steam railroads, four more building, and has nine direct branch roads.
 Augusta is the center of the most vital and far-reaching systems of railroads in the South.
 Augusta is at the head of steam navigation of the Savannah River, in access to the sea, insuring her low freights for all time.
 Augusta is in the center of the richest agricultural region of the Southeast.
 Augusta is the best cotton market in the South, and also the largest inland cotton market in the United States, except Memphis.
 Augusta has a population of 45,000 (including suburbs), which

is larger than that of Chattanooga, Little Rock, Knoxville or Birmingham.

Augusta is the LARGEST LUMBER MANUFACTURING CITY in GEORGIA, which means the largest in many States.

Augusta has in her surrounding territory, for furniture and other woodworking manufactories, the following hardwoods: oaks, hickories, ashes, maple, poplar, cedar, cypress, walnut, sassafras, and tupelo and other gums.

Augusta is in the midst of vast beds of kaolin, fire-brick clay and other clays, ochre, superior glass sand and granite, and marble, copper, iron and coal are in easy access.

Augusta, in addition to cotton factories, has foundries, railroad and other machine shops, car works, flour mills, grist mills, cottonseed oil mills, lumber manufactories, brick works, ice factories, gas and electric light and power plants, fertilizer factories, a cotton compress, a pine fibre and soap factory, a brewery, a glass factory, a paper mill, besides many smaller industries. But these do not meet the trade, and can be profitably repeated many times, while there is need at the same time for many entirely new industries.

Augusta has churches, clubs, asylums, hospitals, colleges and various homes, public libraries, parks, theatres, a cotton Exchange, besides other exchanges, city and government public buildings, wealthy home insurance companies, and building and loan associations, and other establishments of a large and wealthy city, together with beautiful and elevated suburbs. The city of Augusta is one of the best planned cities in any country, being level as a die, lying beside a river, with broad and shaded streets, straight as arrows, intersecting at right angles, and disappearing in vistas. Augusta is cool and fresh the year round.

Augusta is a HEALTH RESORT along with her other attractions,

for she is in the track of the winter hotels, and has some of the finest hotels and suburbs of the resort character in the Southern country. Notably among the hotels, is the "Bon Air," the famous hotel resort, Aiken, S. C., is only 15 miles distant. Augusta is free from all malarial, and is dry and healthful. Her residences and residence streets and suburbs are noted in Georgia for their excellence and beauty, and Richmond County, in which Augusta is situated, has the reputation in Georgia of having the best system of public roads in the State.

The following is the Chronicle's report of Augusta's trade during 1890, which is a convincing argument of the solid commercial growth of the city:

Cotton, 204,000 bales.....	\$10,000,000
Cotton manufactures.....	6,000,000
Groceries, provisions—wholesale and retail..	32,500,000
Liquors, tobacco and cigars	2,100,000
Commercial fertilizers.....	2 00 000
Miscellaneous manufactures.....	5 550 000
Dry goods and clothing.....	2, 0 1,000
Boots, shoes and hats.....	1,200,000
Wagons and Carriages.....	750 000
Horses, mules, &c.....	500,000
Furniture and carpets.....	300,000
Drugs, oils and paints.....	100 000
Miscellaneous retail trade.....	5,650,000
Lumber, sash, doors, &c.....	750,000

Total volume of trade.....\$69,950,000

Study the above and see what may be profitably manufactured in Augusta.

Augusta is growing, and growing fast, and will welcome every new industry.

In conclusion, addressing the world at large, it is wished to say: In view of Augusta's present commercial and manufacturing importance, there are few cities anywhere that offer so much to additional

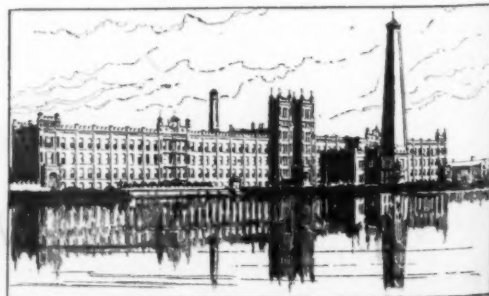
establishments in the LARGE WHOLESALE AND JOBBING TRADE as Augusta.

Any further information will be cheerfully given by any of the following parties:

PATRIOT WALSH, President Augusta Exposition.
 D. R. DYER, President Augusta Ry. Co.
 E. J. O'CONNOR, President Murray Hill Improvement Co.
 JAMES U. JACKSON, Manager North Augusta Land Co.
 J. H. ALEXANDER, President Alexander Seed & Drug Co.
 C. V. WALKER, President Augusta Real Estate Exchange.
 W. C. JONES, Secretary Augusta Real Estate & Improvement Co.
 C. E. COFFIN, President Mutual Real Estate & Building Association.
 A. J. GOULEY, President Irish-American Investment Co.
 JAS. L. FLEMING, President Augusta Real Estate & Investment Co.
 W. C. JONES, Secretary Augusta & Summerville Land Co.
 BOYKIN WRIGHT, President Druid Park Land Co.



AMONG THE MANUFACTORIES.



SIBLEY COTTON MILL.

LAWRENCEBURG, TENN.

A Coming Residence and Industrial City, Educational Center and Health Resort.

Small Industries Wanted to Work Up Our Cheap and Splendid
TIMBERS AND PIG IRON.

No place like it for
FURNITURE FACTORIES,
CARRIAGE WORKS,
CARRIAGE AND WAGON TIMBERS,
AGRICULTURAL IMPLEMENT WORKS,
CHAIR FACTORY,
BARREL FACTORY,
TOOTHPICK FACTORY,
WOODEN PIPE FACTORY.
ANYTHING OF WOOD.
Or
MACHINE SHOP,
FOUNDRY,
Or ANYTHING OF IRON.

LAST WEEK WE LOCATED A

ROLLER PROCESS FLOUR MILL,

A GOOD WOODWORKING ESTABLISHMENT

— AND A —

Male and Female College.

A CANNING ESTABLISHMENT

Is promised for next fall.

Every person who visits Lawrenceburg is impressed with advantages of its location.

Not a wheel has stopped during the recent hard times. Our factories are all making money, and there is room for many more.

SMALL INDUSTRIES--DIVERSIFIED INDUSTRIES, That is What We Want.

Some Excellent Investments can be Made in Lawrence County Timber and Mineral Lands.

ADDRESS

V. S. PEASE, Secretary,

Nashville, Tenn.

THE LAWRENCEBURG LAND & MINERAL CO.

Or Room 63, 185 Dearborn St., Chicago, Ill.

Lawrenceburg, Tenn.

The Winston Land & Improvement Company.

Charter granted by Act of Legislature, Session of 1887. Ratified March 4, 1887, Chapter 82.

Authorized Capital, - - \$1,000,000.

Present Capital Stock \$125,000. All Subscribed and Paid Up.

OFFICERS:

G. W. HINSHAW, President, of Hinshaw & Medearis, Wholesale Merchants; Vice-President People's National Bank, Winston, N. C.
DR. W. L. BROWN, Vice-President, of Brown Brothers, Tobacco Manufacturers, Winston, N. C.
W. F. TROGDON, Secretary and Treasurer, North Wilkesboro, N. C.

BOARD OF DIRECTORS:

GEO. W. HINSHAW, Winston, N. C.
MAJ. CHANNING M. BOLTON, Chief Engineer Richmond & Danville Railroad, Washington, D. C.
P. H. HANES, of P. H. Hanes & Co., Tobacco Manufacturers, Winston, N. C.
COL. J. M. WINSTEAD, Cashier Piedmont Bank, Greensboro, N. C., and President H. P. Scales Tobacco Co., Atlanta, Ga.
A. A. FINLEY, ESQ., Mayor of North Wilkesboro, N. C.

ATTORNEYS:

T. B. FINLEY, ESQ., North Wilkesboro, N. C.
HON. C. B. WATSON, Winston, N. C.
HON. J. C. BUXTON, President First National Bank, Winston, N. C.
HON. W. W. BARBER, Wilkesboro, N. C.

THE COMPANY OWNS THE NEW TOWNSITE OF

NORTH WILKESBORO,

NORTH CAROLINA,

Consisting of 1,036 acres, and also owns 4,100 acres of Mineral and Timber Lands in Wilkes County, which property is now being developed. Townsite purchased November 11, 1890. Property put on market at private sale and first lot sold May 12, 1891. North Wilkesboro chartered by the legislature March 4, 1891.

Forty-three buildings already on the townsite.

Already established, one large, handsome, well-furnished and well-kept Hotel; one Saw Mill, Planing Mill, Door and Sash Factory combined; two Saw and Planing Mills; two Brick-yards; one Tan-yard; one Newspaper, the "North Wilkesboro Progress." Charter was obtained from the last General Assembly for the Bank of North Wilkesboro; the capital stock, \$50,000, has been subscribed, and bank will open for business as soon as the bank building can be completed; ten Stores and one large Livery Stable.

Ten miles of streets graded.

Manufacturing sites will be donated and stock subscribed to such legitimate enterprises as may be advantageously located here.

North Wilkesboro, 75 miles west of Winston-Salem, on the Northwestern North Carolina Railroad, is the most important trading point between Winston-Salem and Bristol,

Tenn., and is in the center of the great undeveloped mineral and timber district of Northwestern North Carolina, being by United States postal map, on an air line, 75 miles southeast of Bristol, Tenn., 45 miles east of Cranberry, N. C., 40 miles north of Statesville, 45 miles northeast of Hickory, 90 miles northeast of Asheville, 45 miles southwest of Mt. Airy, N. C., and 80 miles north of Norfolk & Western Railroad, in the Valley of the Yadkin, between the Bruohy mountains on the South and Blue Ridge on the north. The best located, watered and drained town in North Carolina.

Her climate is of unsurpassed salubrity and healthfulness. Fresh water and mineral springs abound, and the 328 miles of water courses in Wilkes County furnish a water power of almost incalculable magnitude.

Home seekers, health seekers, and wood and iron manufacturers, will do well to investigate North Wilkesboro's advantages.

PLATS, PRICES AND ANY DESIRED INFORMATION PROMPTLY FURNISHED ON APPLICATION TO

W. F. TROGDON, Secretary and Treasurer,

NORTH WILKESBORO, N. C.

ALEX. A. ARTHUR,
President.

FRANK WATTS,
Vice-President.

JOHN B. CARY,
Secretary and Treasurer.

The Middlesborough Town Company.

Capital - - \$3,000,000.

OFFERS TO

Manufacturers, Merchants, Bankers, Investors,

AND TO ALL OTHERS SEEKING A LOCATION TO BUILD

Factories, Foundries, Stores, Warehouses, Repositories, &c.,

REASONABLE INDUCEMENTS TO SELECT

Middlesborough, Ky.

AS A PLACE OF

RESIDENCE OR FOR BUSINESS.

Her Mineral and Timber Wealth is Unbounded and Inexhaustible.

Her Location is Unequalled.

Her Climate is Unexcelled in this Country.

Her Growth and Marvellous Development Stand Unparalleled in History.

Her Industries, Manufactories and Commerce aggregate the sum of \$21,000,000 of Capital actually invested.

She Enjoys Postal, Telegraph, Express, Banking and Insurance Facilities with all the Business World.

She has easy Communication by Rail with all Sections of the Country.

She has better Coking Coal than can be found elsewhere.

She is only Two Years Old and already has a Population of 8,000 People.

She has already two large Iron Furnaces completed, an immense Steel Plant, a mammoth Tannery in operation, a Brewery, Cold Storage and Ice Manufacturing Plant, Gun and Heavy Ordnance Works, a Telephone System, a Belt Railroad twenty-three miles long, an Electric Street Car System, Water Works, Electric Lights and hundreds of smaller plants of every description.

FOR ILLUSTRATED BOOKS, CIRCULARS AND ALL OTHER INFORMATION, ADDRESS

JOHN M. BROOKS, - Resident Manager,

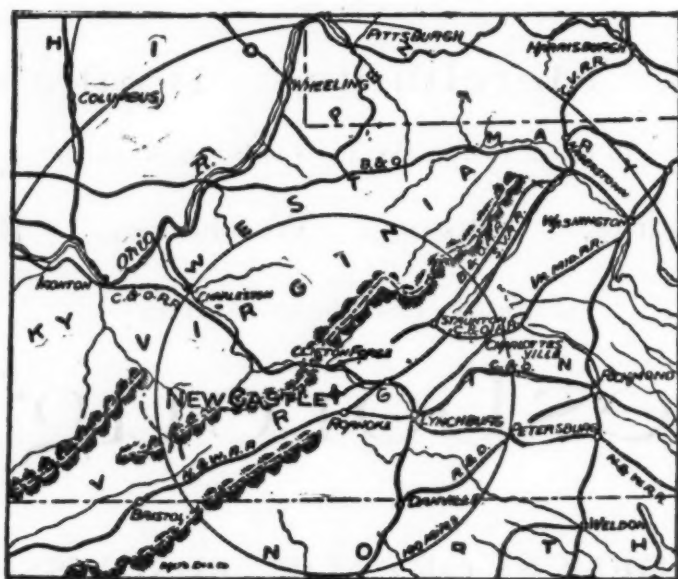
MIDDLESBOROUGH, KY.

NEW CASTLE, ^{Craig}County, VA.

• THE IRON BONANZA, •

Convenient to Fuel Supply.

*A City of Immense
Possibilities without
a Rival in all that
goes to Create
Wealth and Power.*



*A Home for Invalids
in which to
Lengthen out their
Lives, and for all
to be and Remain
Healthy & Happy.*

PARADISE OF THE HUNTER AND HEALTH SEEKER.

Future City of the Alleghanies and
Center of Iron Production.

Commodious Hotel for the Entertainment of Summer Guests.

TOWN LOTS FOR SALE.

FOR INFORMATION ADDRESS

A. E. HUMPHREYS, Prest., New Castle, Va.

THE BEST INVESTMENT ON THE MARKET

IS THE STOCK OF THE

EAST RICHMOND CO.

Par value of shares, \$25. Payments each month per share, \$1.00. Twelve shares, costing \$12 per month, or \$300 in all, entitles the holder to one lot free, the lot to be decided by a drawing. The \$300 worth of stock participates in all the profits of the Company derived from the 3,000 lots left to the Company after the drawing and those reserved for free sites to factories and all other interests of the Company.

East Richmond consists of about 1,000 acres of manufacturing and residential property, the most desirable around Richmond, the center of which is only two and a-half miles from the City Hall, the center of the city. For the purchase and improvement of this property the Company issues \$1,000,000 of stock as described above. The Company has secured factories which

WILL EMPLOY 1,000 HANDS.

These buildings are now being erected, and will be in full blast in three months. This will give East Richmond a population of several thousand in the near future, residences for which are contracted and now being erected. Considering the above, with its close connection to Richmond proper, as described below, East Richmond offers a golden opportunity for investment.

Population of Richmond and suburbs,	105,000
New houses per annum,	1,200
Banking capital,	\$4,500,000
Bank clearings,	\$112,000,000
Number of manufactures,	783
Different kinds of manufactures,	99
Increase in 1890,	59
Value of manufactured products,	\$34,500,000
Jobbing sales	\$32,000,000
Miles of electric street railway,	27
Miles of horse street railway,	10

10,000 MILES OF RAILROADS

Center in Richmond. Water navigation to all points of the world. No point in the whole country can offer such inducements as the East Richmond Company. The lots drawn with the stock will be very valuable. At a recent sale lots the same distance from the city brought \$500 and \$600. For full information address

DAVID W. REINHART, General Manager, 819 E. Main Street, Richmond, Va.

ELKTON, VIRGINIA.

IN THE WORLD-FAMED SHENANDOAH VALLEY.

Presents to-day the Best Opportunities for Safe and Profitable Investments to be Found in Virginia.

In one short year it has grown from a mere hamlet to a town of nearly 900 souls.

When factories now in course of construction are all in operation, at least 1,200 people will have their homes in Elkton.

Our industries are numerous and varied.

We do not depend on any one big concern to make or break us.

The immense TIMBER SUPPLY gives employment to a number of Saw Mills and Planing Mills and Lumber Yards.

We have also a Sash, Door and Blind Factory,
A Steam Bark Mill (under construction),

A New Roller Mill, 100 barrels daily capacity,
A Large Tannery,
Steam Brick Works,
A Cannery (contracted for),
Wagon and Spoke Factory (under construction),
A Large Cutlery Factory, nearly completed, which will employ at least 50 hands, and which will begin work in June.

Besides, are the various minor industries to be found in every town, such as Blacksmith, Harness, Wheelwright, Carpenter, Cabinet Makers, Tanners, Plumbers, Etc., Etc.

A Water Company supplies pure Lithia Water through a complete system of pipes to all residences and stores desiring it.

RATES:

For Single Days, . . . \$2 to \$3
Weekly Rates, . . . \$9 to \$15
Monthly Rates, . . . \$25 to \$50
Special Rates to Ministers.



THE ELKTON HOTEL.

Rooms May be Engaged and
Prices Fixed by Applying to

C. P. WALTERMIRE, Manager.

June 22, 1891.

The Finest Hotel in Virginia, "THE ELKTON," is here. Run under the management of the Elkton Improvement Company.

Lighted by gas, supplied with pure lithia water in unlimited quantity, and with all modern conveniences.

Investors will find our property priced so as to insure profits.

NO FANCY PRICES have been asked, but values will be confined to ACTUAL WORTH.

We invite Investors, Home Seekers, Tourists, Business Men, Manufacturers, small and great, to COME TO ELKTON.

FOR PARTICULARS ADDRESS

THE ELKTON IMPROVEMENT COMPANY,

S. P. H. MILLER, President.

S. O. SPENCER, General Manager.

THOMAS K. HARRISBERG, Secretary & Treasurer.

As A LOCATION for Manufactures

Of Iron and Wood and for General Industrial and
Business Enterprises,

FRONT ROYAL, VA.

INVITES INVESTIGATION.

Its location, at the junction of the Norfolk & Western Railroad (Shenandoah Valley line) and the Richmond & Danville's branch, give it excellent transportation facilities. It is only a few hours' ride distant from Washington. The Norfolk & Western's direct line to Washington will be built from Front Royal.

There is no Finer Agricultural Country in the World than the Famed Shenandoah Valley, in which Front Royal is Located.

A WIDE RIVER WITH SWIFT CURRENT FURNISHES WATER POWER
AND MAKES DRAINAGE PERFECT.

Front Royal is a Prosperous Town, with an Extensive Mercantile Business
and Many Manufacturing Enterprises in Operation and
Under Construction.

INVESTIGATION OF ITS ADVANTAGES IS INVITED BY THE

Front Royal--Riverton Improvement Company,
FRONT ROYAL, VIRGINIA.

MINNEAPOLIS, VA.



Minneapolis is Under the Management of GEN. THOMAS L. ROSSER, Builder of the Northern Pacific and Canadian Pacific Railways.

Resources.

Coal and Iron, both in Inexhaustible Quantity and Unexcelled Quality, In juxtaposition. In the Center of a District Composed of Five Counties, Containing More Timber Than Minnesota and Wisconsin Combined.

Advantages and Attractions.

A Healthy and Beautiful Situation in a Valley 2,000 feet above Sea Level, Surrounded by Mountains.

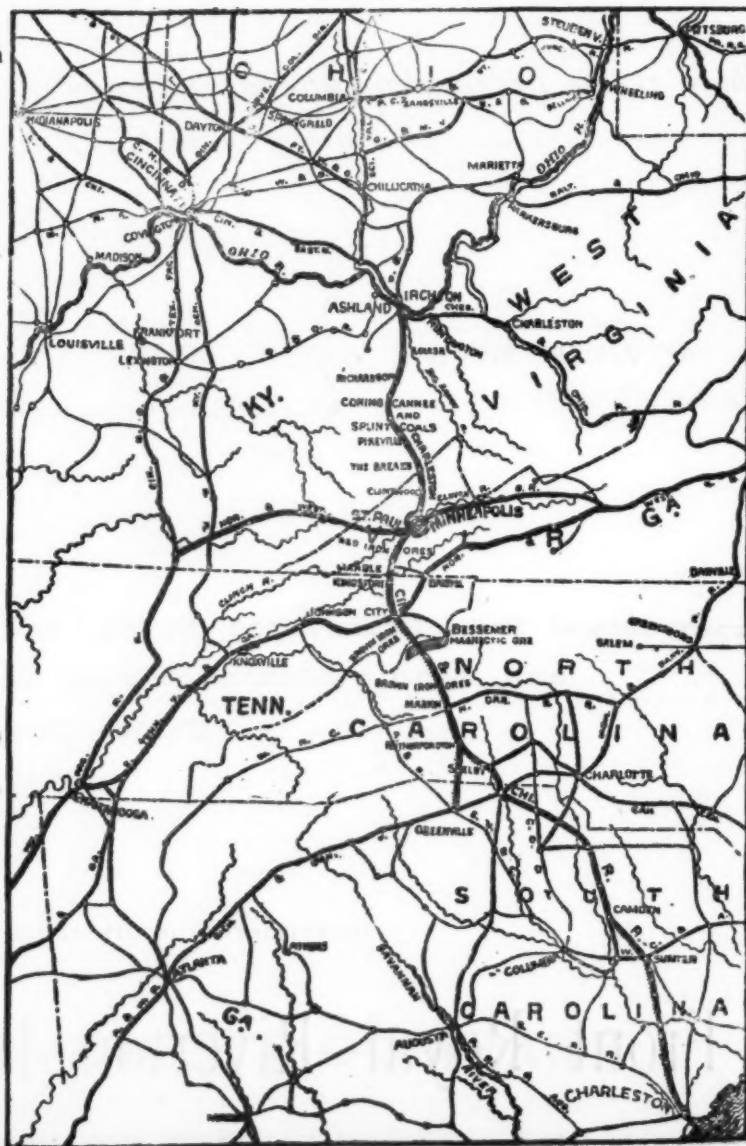
Encircled by a Large Bold Stream, ample for Water, Drainage and Power.

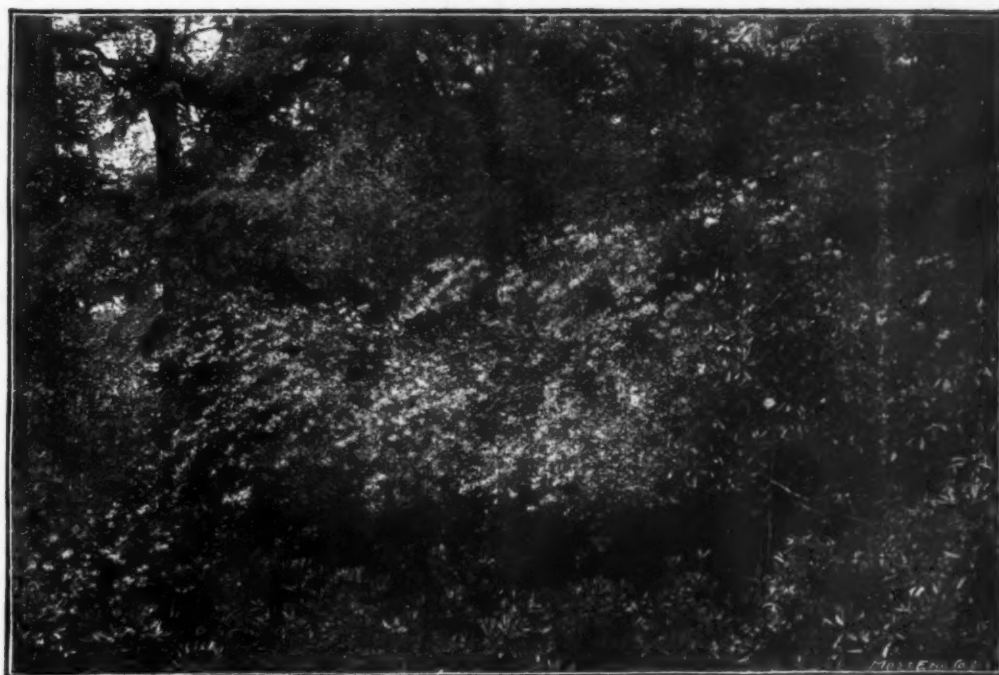
The Crossing Point of the Norfolk & Western and the Three C's, the Future Great East and West and North and South Trunk Lines.

INDUSTRIES FROM ALL SECTIONS

Are now Seeking a Location at Minneapolis on Account of the Minimum Cost and Maximum Quantity and Quality of Raw Materials, the Fine Transportation Facilities and the Healthfulness and Beauty of the Site.

JOHN M. WHITE, Treasurer,
CHARLOTTESVILLE VA.





KALMIA AND RHODODENDRON.
IN FOREST NEAR LINVILLE, NORTH CAROLINA.

IN WINSTON-

THERE IS REAL ESTATE

In North Carolina, and Conspicuously so in Winston-
Than Anywhere Else

If you keep pace with the development of this great nation you know that this is North Carolina's year. In percentage of increase of population she leads every Southern State east of the Mississippi river, West Virginia and Florida alone excepted. If you know anything about this vast empire of mineral, timber and agricultural wealth you know Winston-Salem has more established factories, does more business and has brighter prospects for a great future than any other city in North Carolina.

As prices are low and a great development here in progress, this is the place to buy town lots. Even during the midsummer, there has been a steady demand for city property, 90 per cent. of which was for immediate use for stores or residence purposes.

Now is the time to buy. There will be a season of unprecedented activity in Winston-Salem this fall, and you can get in on the ground floor figures just now.

There are about 12,000 more people in the twin cities now than in 1880. This growth was made without any artificial aids, and represents just that many more manufacturers, business men and wage workers.

There have been marketed in Winston in the past nine months 14,000,000 pounds of leaf tobacco. The end of the tobacco year will probably see 3,000,000 more pounds marketed here. The average price paid is about 12 cents a pound. There are less than 30,000 people in Forsyth county. So there is paid out in hard cash for this one item at least \$60 per head per annum for every man, woman and child in the county.

There are 36 plug tobacco factories, and there are about seventy-five other factories—extensive wagon works, woolen mills, cotton factories, etc.—and they pay out over \$1,000,000 a year in cash for wages. This is over \$3,000 a day—nearly 25 cents for every man, woman and child in the city.

Is it any wonder that with such a stream of life blood being constantly pumped through her arteries Winston-Salem should be the most substantial, liveliest and best town of its size in the upper South?

There are 90,000 acres of timber land in Forsyth county alone—heavy oak forests, interspersed with hickory, walnut, poplar and pine. Dozens of woodworking establishments

If you desire Lots in WINSTON-SALEM
views, pamphlets or other

PETER M. WILSON, Manager West End Hotel & Land Co.
F. M. SIMMONS, President Winston-Salem Land & Investment Co.

G. W. MASLIN, Winston Development Co.
W. F. ANDERSON, Manager North Winston Land & Improvement Co.

WINSTON-SALEM,

SALEM, N. C.

ACTIVITY RIGHT NOW.

Salem, there is More Development Work Now Going on in the Whole Country.

find profitable employment for their capital. Does'nt it seem certain that dozens of others would find the field a profitable one?

Undeveloped coal fields, immense deposits of magnetic iron ore and acres of lime cliffs in the neighborhood, suggest possibilities in iron industries which are demonstrated in the development of new towns everywhere in the South.

Winston-Salem is the center of four railroads, and its North, South, East and West connections will soon be unsurpassed.

\$500,000 worth of new buildings were put up last year. There will be \$1,500,000 worth erected this year, including a \$100,000 hotel, and the demand is still far from being supplied.

Electric car lines, electric lights, telephone service, water works, Belgian block and macadamized streets are some of the necessary luxuries now enjoyed.

Having an altitude of more than 1,000 feet, with an average summer temperature of 80 degrees, and a mean winter temperature of 40 degrees, and an annual rainfall of 48 inches, it has an advantage in climate which has for a century given this section a great reputation for healthfulness.

The famous Salem Female Academy and the graded and military schools give unexcelled educational advantages.

There are seventeen churches, and the tone of the community is of the most elevated character. Salem is the center of the old Moravian settlement, and Winston is an energetic and in every respect creditable offspring.

Six conservative and responsible land companies offer for sale business, manufacturing and residence properties in and immediately adjoining the city, all within a mile of the public square.

There is no city in the South with so abundant a supply of such beautiful suburban residence property in all directions as Winston-Salem possesses.

The substantial basis upon which Winston-Salem is built, her wealth-producing power, her rich surrounding country, her present needs and her inevitable increase in every material way, invite the manufacturer, the capitalist, the investor, the builder and the mechanic from everywhere, and promise him sure and generous rewards.

or any of its additions, plats, birds-eye information write to

JOHNSON & JONES,
J. E. CATLIN,
P. C. HUMPHREY or
AMIS & SCOTT,

Real Estate Agents.

NORTH CAROLINA.

SAVERNAKE, *Rockbridge County,* VIRGINIA.

FOR 1891 Offers to the Investor a Most Desirable Opportunity for Profit.

LOTS for Business and Residence Purposes

AT PRICES TO SUIT THE TIMES.

SAVERNAKE adjoins Buena Vista on the Southwest; fronts on Shenandoah Valley Railroad and on James River Division of the Chesapeake & Ohio Railway. High Grade Manganese and Iron Ores to steel and iron trades. Safety and profit to investors. Healthy and picturesque homes at moderate prices to lot buyers, notwithstanding the late depression due to monetary stringency and unusually severe weather.

The industries secured for Savernake have all been retained, and will proceed to build as soon as the weather permits.

THE SAVERNAKE PRESSED BRICK COMPANY.

This Company, formed to manufacture from the superior clay deposits found at Savernake, the highest grade pressed, front and ornamental brick, is now erecting the pressed brick works,

CAPACITY 40,000 BRICK DAILY.

The capital of the Company is \$30,000, full paid. The grade of brick to be made here sells now for \$30 per 1000 at Buena Vista, and allows a very fair margin of profit, insuring large dividends to shareholders.

A limited amount of stock remains unsold.

Prospectus may be had and all information obtained by application at office of Savernake Pressed Brick Co., Savernake, Va.

It is expected that the works will be completed and in operation in thirty days.

THE SAVERNAKE INVESTMENT CO.

The Savernake Investment Company has been organized under a very liberal charter, granted by the Circuit Court of Rockbridge county, Va. It is empowered to do a general

CONSTRUCTION AND IMPROVEMENT BUSINESS,

to buy, sell, rent or lease real estate, to remove encumbrances from the same, to accumulate funds for investment, loans, manufacturing, banking commercial or other purposes, as may seem to the Directors most profitable.

The Company has purchased seventy-five residence lots and twenty-five business lots in the town of Savernake for \$35,000 of paid-up stock

in the Investment Company. The present market value of the above lots is \$62,500, thus leaving \$27,500 over and above the amount paid for the lots as a profit, belonging to the stockholders.

It is proposed to make the minimum stock of the Company \$70,000, to be divided into shares of \$50 each; 700 shares will be issued to the Company in full payment for the 100 lots purchased, and the remaining 700 shares (\$35,000) will be placed on the market on the following

TERMS:

Ten per cent. at the time of subscription,	\$ 5 00
Ten per cent. on call of the Directors,	5 00
Ten per cent. every thirty days thereafter,	40 00
Par value,	\$50 00

The \$35,000 realized from the sale of the stock will be used in building upon and improving the lots purchased, or for other purposes named in the charter, as may be deemed most profitable by the Board of Directors.

ATTENTION is called to the fact that no Building or Investment Company yet organized at any of the new towns of Virginia has failed to realize large profits.

THE VALLEY INVESTMENT COMPANY, of Buena Vista, organized July, 1890, capital \$10,000, on October 1st, with a paid-up capital of \$4,000, showed net earnings \$6,000.

THE SOUTHWEST VIRGINIA INVESTMENT COMPANY, composed of Philadelphia capitalists, organized about two months since, with a capital of \$100,000, now shows profit of \$33,000.

THE HOME INVESTMENT COMPANY, of Buena Vista, commenced business about September 1st, 1890, with \$3,000 paid in, and on the 15th of October last, reported as actual undivided profits \$1,710, and an estimated profit of \$23,000, representing the difference between the cost of their property and the market value.

THE LEXINGTON INVESTMENT COMPANY commenced operations at Buena Vista about twelve months since, with a proposed capital of \$30,000. Paid \$10,750 for 50 lots; after collecting 50 per cent., declared the stock paid up, and could realize \$420 per share if the property were placed on the market.

When it is considered as a basis for the subscription of \$35,000 to the capital stock of the Savernake Investment Company that its 100 lots are paid for in full and represent a positive value of \$27,500 more than the amount paid for them, it must readily suggest to any one the very desirable character of this stock. Under the charter the following are the officers of the company for the first year:

OFFICERS:

PRESIDENT, J. HOWARD WAYT, Staunton, Va.
SECRETARY AND TREASURER, J. E. B. STUART, Buena Vista, Va.

VICE-PRESIDENT, THOMAS DUNLAP, Savernake, Va.
MANAGER, J. M. HENKLE, Buena Vista, Va.

DIRECTORS:

J. HOWARD WAYT, Staunton, Va. THOMAS DUNLAP, Savernake, Va. W. H. H. LYNN, Staunton, Va. J. M. HENKLE, Buena Vista, Va.
SAMUEL SADDINGTON, London, England. STEVENS M. TAYLOR, Lexington, Va. J. E. B. STUART, Buena Vista, Va.

Subscriptions may be sent to and all information had of J. E. B. STUART, Secretary and Treasurer, Buena Vista, Va.

Capitalists Desiring Prudent Investments

In Southern Manufacturing Enterprises, conducted by experienced specialists in works with an established trade for years and proposing to remove to

SAVERNAKE

with the coming spring, can address the management as below.

THE LINES OF MANUFACTURES PROPOSED, ARE:

Steel Ingots.

Under one of the new direct processes, now commercially established, affording large profits and worthy of closest investigation.

Agricultural Steel Forgings.

Including Spring Steels and Mining Tools, Picks, Mattocks, &c., &c.

Locks, Knobs and Builders' Hardware.

High-grade goods in real and imitation Bronze, Silver and Nickel-plated goods, &c., with established reputation and extensive trade. A most desirable opportunity.

Tin and Tin-Plate Co.

With advantages believed to be unsurpassed by those of any other company formed for this purpose, viz:

Ownership of valuable Tin Ore lands of demonstrated value in the Blue Ridge Tin field of Virginia.

Promotion of Steel and Steel-Plate for Tinning on the spot from ores controlled by the Company, at minimum of cost.

Management of various branches by specialists of experience in Tin mining, dressing and smelting; in steel metallurgy; in Tin-Plate making and marketing.

Management of finance by capitalists of experience and position in the financial world.

Control by ownership of the best, and most generally used abroad, Tinning process—patented—and of various other late and improved devices for the most economical production of Tin Plate.

Demonstrated and verified cost and profit sheets will be furnished principals meaning business.

Steam Engines, Boilers,

Complete Power Plants, Iron Bridges and General Machinery Works, established 1830, trade general throughout United States. Management of first respectability. Investment most desirable.

Hydraulic Cement Works.

Deposit large, running through 1,200 acres, quality stated to be same as James River cement. Location, within half a mile of two parallel railroads. Demand strong. A most profitable industry.

Fire-Brick Works.

Clay in large supply, near railroad. Has been tested and pronounced first-class. Every facility for manufacture at large profits.

All or any of the above offer safe and desirable investment for capital on business principles, at bed-rock prices, and with no "promoter's funds."

The owners of these works, with the exception of two—the Tin-Plate Works and the Hydraulic Cement Works, which are new—have concluded to

remove them to Savernake after examination of the locality, the raw material the advantages over present site.

All plants are at expert appraised value; trade shown and capital invested demonstrated.

Capitalization is, in every case, upon these data, and necessary additions for removal and extension, and is entirely "without water."

Northern Investors

In Town Mortgages have here an opportunity to obtain the superior advantages and profits of Southern Manufacturing Enterprises, combined with experience, skill and established trade.

The establishment of Savernake as an

Industrial Town

requires capital upon a large scale, and from various sources. Experience teaches that investors are guided by and select from, those opportunities offered in and by the journals of much established repute and widest circulation in their specialties.

The Manufacturers' Record

Has been selected because of its thorough knowledge of Southern investments, its unparalleled success in attracting attention to honest opportunities for Southern enterprise, and because in a largely extended advertising more direct results and more business has been received from it than all other advertising mediums used.

The above enterprises are all ready to proceed at once to building at Savernake. All offer legitimate profit, and are offered only subject to strictest investigation, and on this basis only.

Such a group of industries will demand homes for a large population and for those to supply their necessities and luxuries.

Savernake and Extensions.

Will offer for the season of 1891 some 2,000 desirable BUSINESS AND RESIDENCE LOTS. Prices of these will be in no case speculative. A marked reduction and favorable terms to those who will contract to build their own homes on purchase of lot. A liberal and equitable concession for cash purchases, and to building investment and manufacturing companies.

Foreign Investors

May address for information and particulars THE LOCH LAIRD ESTATE & MINERAL CO., LIMITED, OFFICE, 30 LINE STREET, LONDON, E. C.

American Investors

Will apply to THOMAS DUNLAP, MANAGING DIRECTOR, SAVERNAKE, VA. POSTOFFICE ADDRESS, TRIFORD, ROCKBRIDGE CO., VA.

Railroad Station for both Shenandoah Valley Railroad and Chesapeake & Ohio Railroad, Loch Laird Station, Va. All C. & O. Railroad Trains stop at Savernake.

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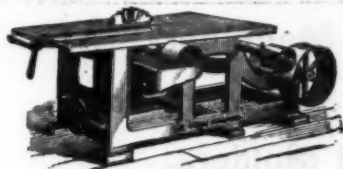
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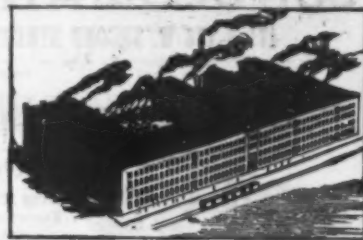
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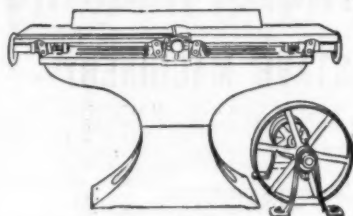
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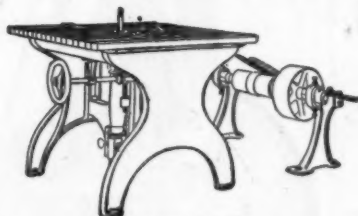


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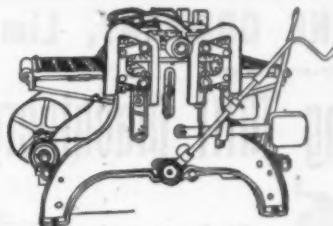
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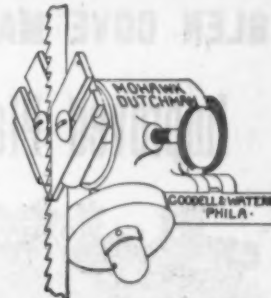
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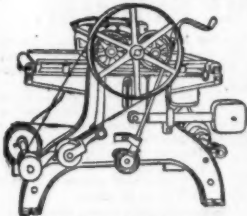
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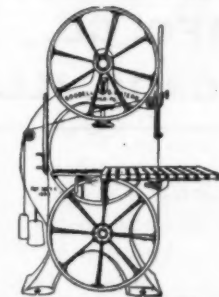
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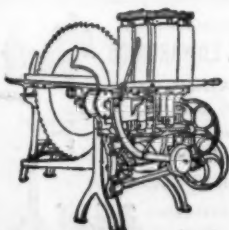
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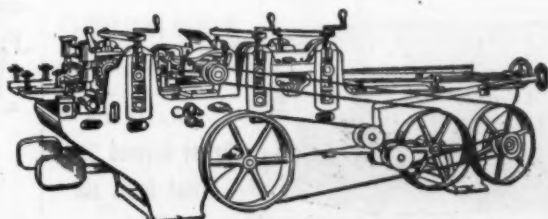
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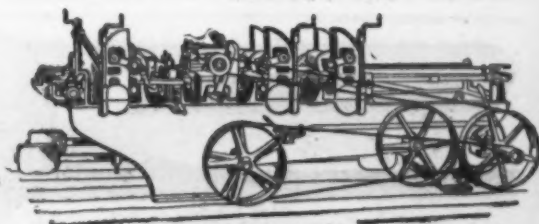
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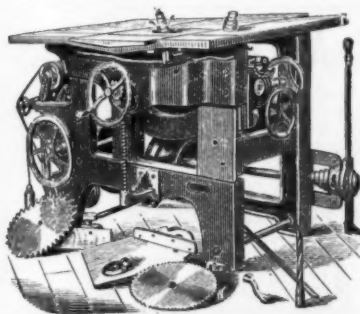
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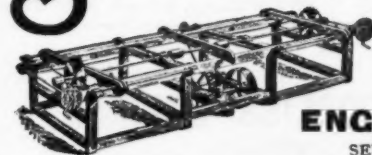
This machine is designed and constructed in such a manner as to combine in a simple and compact form all the essential points of a first-class dimension saw, single spindle reversible shaper, and boring, galling, mortising or routing machine. The arbor is arranged to work at any angle, from horizontal to vertical, with reverse motion, and can be adjusted while running. It is especially adapted to a wide range of work, the changes being quickly made. THE MATERIAL TO BE OPERATED UPON ALWAYS LIES FLAT on the table and the arbor brought into position to do the required work, thus doing away with all toggling up of the material on jacks, etc. All kinds of mortising and routing, etc., is done on this machine, and it is so arranged that the material can be worked above or below on either side of the arbor. This machine is built in three styles. No. 1, A Full Combination. No. 2, As Saw and Shaper. No. 3, as a Finishing Saw. For full particulars and prices address

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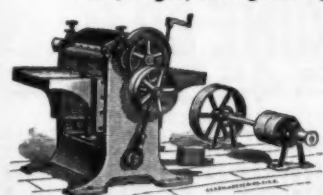
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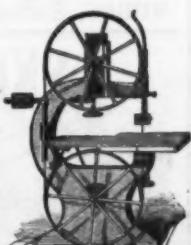
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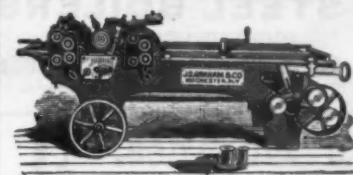


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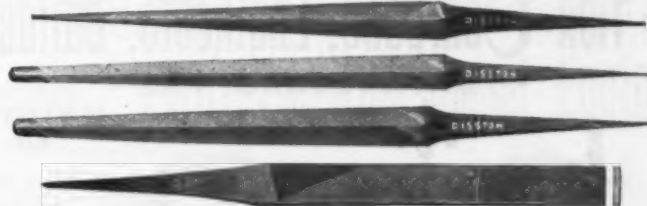
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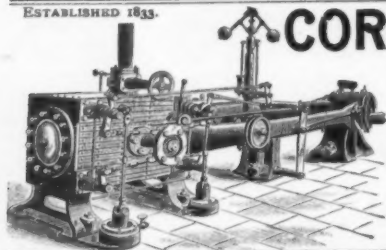
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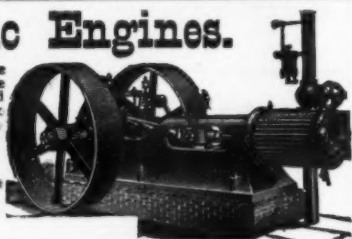
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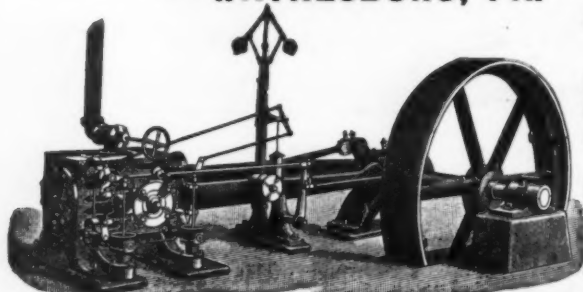
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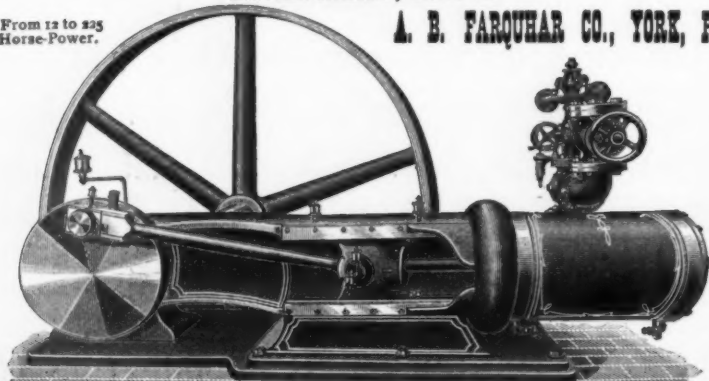
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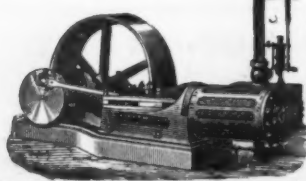
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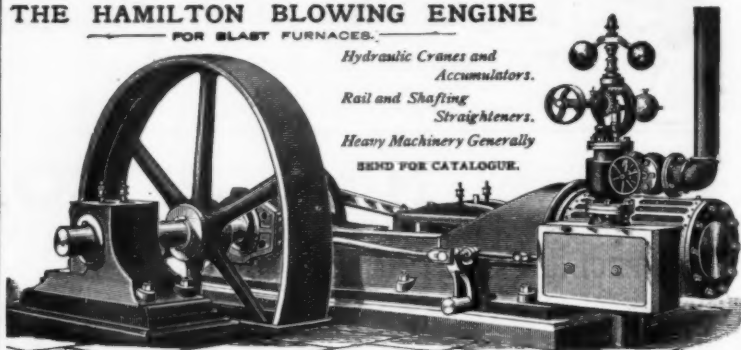
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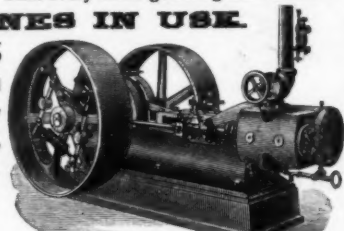
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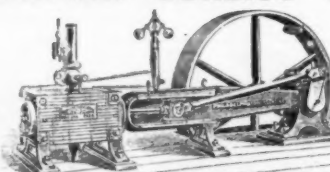
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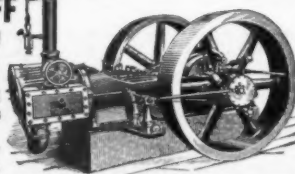
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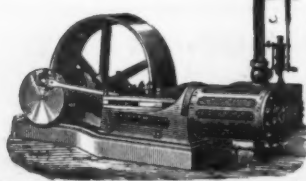
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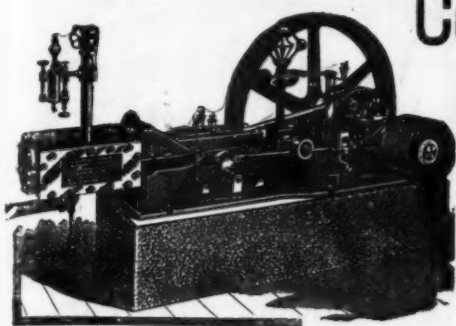
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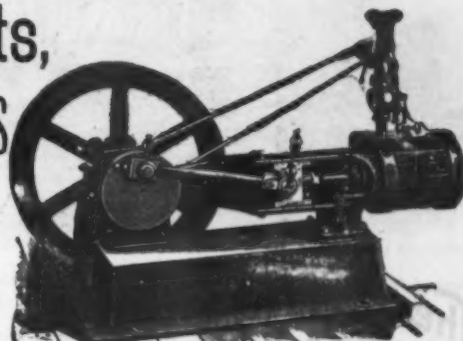
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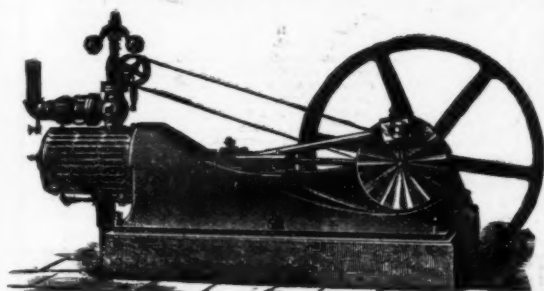
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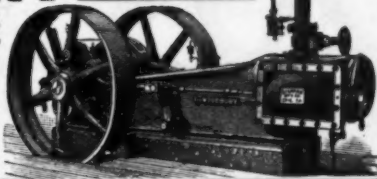
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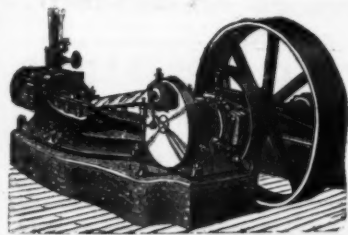
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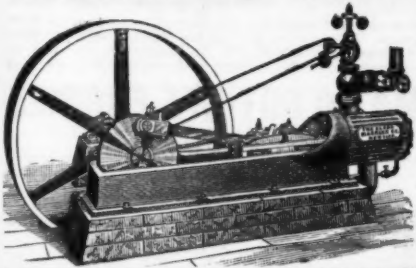
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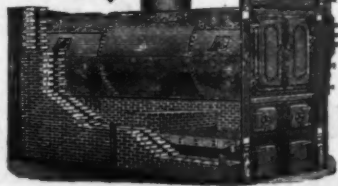
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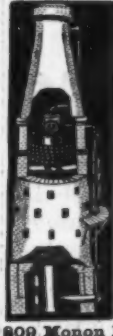
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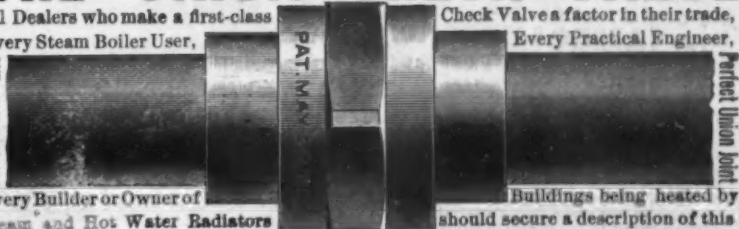
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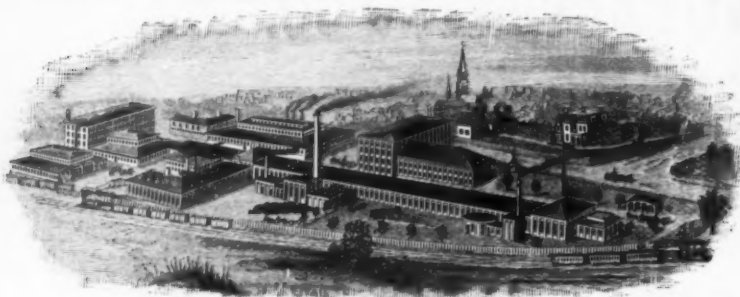
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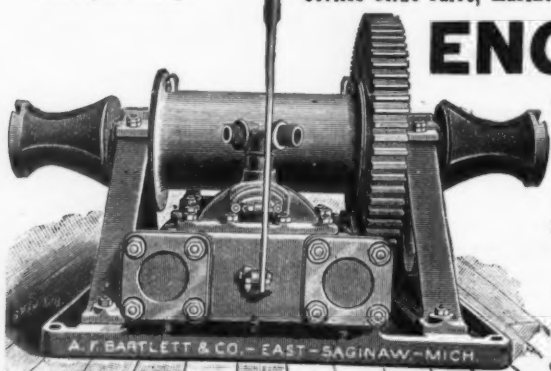
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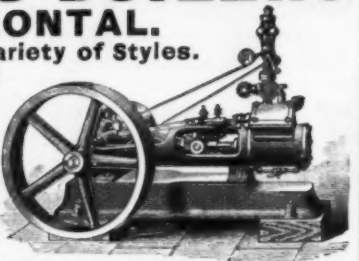
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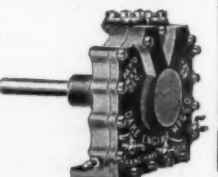
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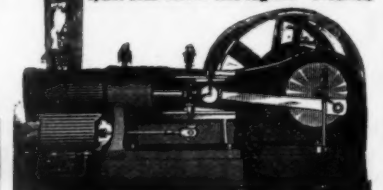
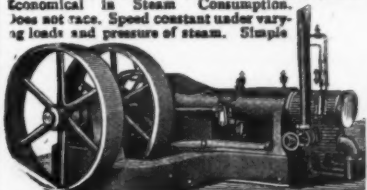
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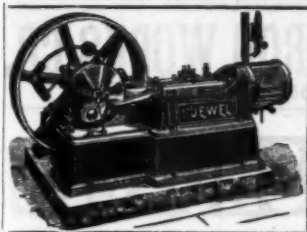
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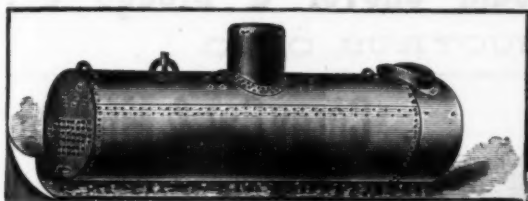
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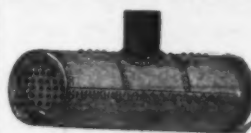
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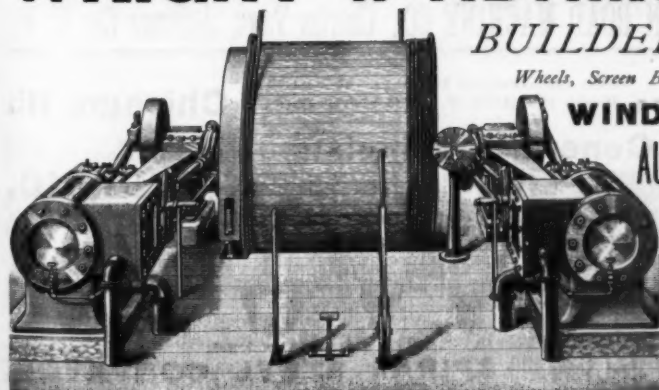
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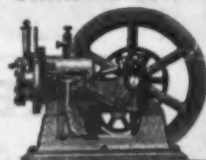
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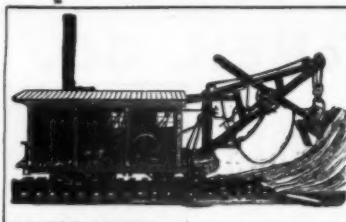
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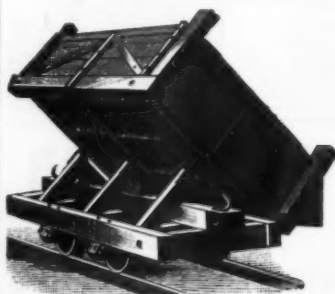


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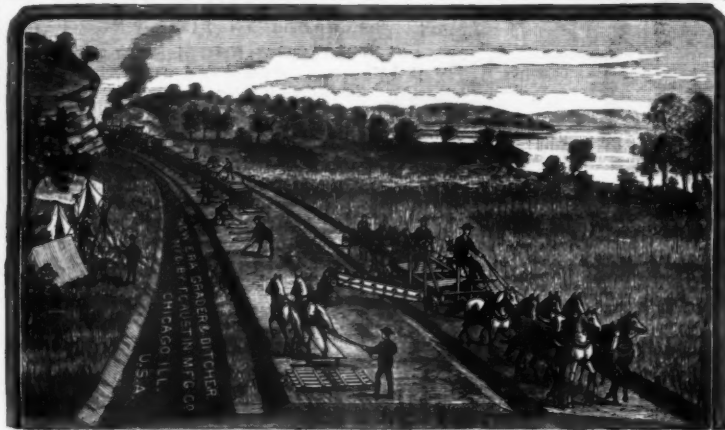
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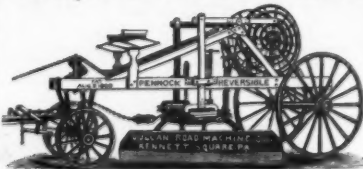


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Railroad Construction

Alvin, Texas.—Railroad.—The Gulf, Colorado & Santa Fe Railway Co. (office, Galveston) will, it is reported, extend its road from Alvin to Velasco.

Anniston, Ala.—Railroad.—J. D. Hunter is said to be locating a 4 mile spur for the East Tennessee, Virginia & Georgia Railroad Co. (office, Knoxville, Tenn.) from the Glover place north of Anniston to Cante's Anniston Lime Works.

Baltimore, Md.—Cable Railroad.—E. D. Smith & Sons, contractors for the extension of the cable system of the Baltimore Traction Co., mentioned in last issue, have sublet contracts as follows: Rails to Johnson & Co., of Johnstown, Pa.; curves, W. A. Rhoades & Co., of Philadelphia, Pa.; castings, Pennsylvania Iron Works, and tubing to George Kinsley & Co., of Cincinnati, Ohio. The probable cost of the extension is \$1,200,000.

Baltimore, Md.—Electrical Railroad.—The Baltimore Union Passenger Railway Co. has, it is stated, completed the equipping of 2 miles of its road with the Thomson-Houston electric system.

Baltimore, Md.—Electrical Railroad.—The North Baltimore Passenger Railway Co. has, it is stated, secured the entire line of the Powhatan Street Railway, and proposes operating part of the road by electricity.

Brooksville, Fla.—Railroad.—Arrangements have, it is stated, been completed for building the Brooksville & Lacoochee Railroad. L. Y. Jeanness can give particulars.

Brunswick, Ga.—Railroad.—W. B. Burrows writes that the Brunswick, La Grange & Northwestern Railroad Co., lately mentioned as applying to the legislature for a charter, hopes to run nearly an air line through La Grange, Ga., to Anniston, Ala.

Charleston, S. C.—Railroad.—The Ashley River Railroad Co. has commenced the construction of the 5 mile extension referred to in last issue.

Chattanooga, Tenn.—Electrical Railroad.—The Chattanooga & Northside Street Railway Co. has, it is stated, commenced the extension of its electrical railroad to the foot of Walden's ridge at Morrison Springs.

Cleburne, Texas.—Railroad.—An engineering corps will, it is understood, be shortly placed in the field to survey the extension of the Gulf, Colorado & Santa Fe Railway (office, Galveston) from Cleburne towards the southwest, previously referred to.

Cynthiana, Ky.—Railroad.—Reynolds & Co., of Cincinnati, Ohio, are reported as submitting a proposition to build the Cynthiana Western Railroad, previously referred to.

Dardanelle, Ark.—Railroad.—It is contemplated to build a railroad from Dardanelle to the foot of Mt. Nebo, 5 or 5½ miles, laid with 30 or 3½ pound steel rails, operated by a motor hauling light loads of freight that can be drawn up the mountain without breaking bulk or transferring passengers. The incline will be about 3,400 feet long, with an elevation from the bottom of from 20 to 45 degrees. It is desired to place a hoist at the top of mountain capable of drawing up from 30 to 40 passengers or from 3 to 4 tons of freight. W. J. Thompson can be addressed.

Daytona, Fla.—Railroad.—The Halifax & Indian River Railway Co., reported in last issue as organized to build a railroad from Daytona to Titusville, a distance of 50 miles, has been chartered by George M. Robbins and Walter S. Graham, of Titusville, and W. M. Brown. The capital stock is \$500,000.

Easley, S. C.—Railroad.—J. H. Burkhalter, of Augusta, Ga., has, it is stated, offered to build the railroad from Easley to Pickens, referred to in last issue, provided \$20,000 in township bonds are voted him.

Farmville, Va.—Railroad.—The directors of the Farmville & Powhatan Railroad Co. (office, Richmond) are to devise means for the widening of the gauge and the extension of this road, previously mentioned, and report to the stockholders a month hence.

Fayetteville, N. C.—Street Railway.—The Fayetteville Street Railway Co. has been organized with J. T. Denny, president, and J. W. McNeill, secretary.

Gallatin, Tenn.—Railroad.—It is reported that J. C. Rodemer has effected a deal with C. P. Huntington, of New York city, by which the Middle & East Tennessee Railroad may be completed within 60 days.

Glyndon, Md.—Railroad.—The extension of the Green Spring branch of the Northern Central Railway Co. (office, Baltimore) to Westminster, reported in last issue as being surveyed, will depend materially upon the aid and assistance the company receives from local interests to be benefited thereby.

Jacksonville, Ala.—Railroad.—The Jacksonville, Gadsden & Attalla Railroad Co. is said to have decided at a recent meeting of stockholders to build a railroad from Jacksonville in a southeasterly direction to the Georgia State line; also build a road from Attalla in a northwesterly direction to the Tennessee line.

Jacksonville, Fla.—Street Railway.—The Jacksonville & Panama Rapid Transit Co. has been chartered by T. T. Stockton, J. S. Bell, M. L. Broward and others to construct a street railway. The capital stock is \$100,000.

Knoxville, Tenn.—Electrical Railroad.—S. W. Miller, of Findlay, Ohio; Samuel Kinney, Major Webb and others have secured the franchise of the Market Square & Southside Railway and will build same. The road is to extend to Middlebrook Park, a distance of 5 miles, and be operated by electric power.

Mt. Airy, N. C.—Railroad.—It is reported that financial arrangements have been made to push to completion the North Carolina extension of the Norfolk & Western Railroad (office, Roanoke, Va.), which has been surveyed to the State line.

New Bern, N. C.—Electrical Railroad.—Two companies have applied for franchise to build electrical railroads. The mayor can give particulars.

New Orleans, La.—Electrical Railroad.—The New Orleans & Carrollton Railroad Co. will again petition the city council for franchise to operate its Carrollton line by the overhead electric system.

Orangeburg, S. C.—Railroad.—W. B. Thompson, Samuel Dibble and J. W. H. Dukes will, it is stated, apply to the legislature at its next session for a charter to build a railroad.

Rome, Ga.—Railroad.—The bill incorporating the South Atlantic Railroad Co., lately reported as introduced in the legislature, having passed that body and been signed by the governor, has become a law. R. T. Armstrong can give information.

Sylva, N. C.—Railroad.—H. M. Ramsaur, chief engineer, reports that the Carolina Mining, Manufacturing & Improvement Co., lately reported, has commenced building the railroad from Sylva to Webster, a distance of 4 miles, and will extend same in a short while. The road is to develop mineral interests.

Texarkana, Texas.—Railroad.—The Texarkana & Fort Smith Railroad Co. will, it is stated, increase its paid-up stock to \$4,000,000.

Thomasville, Ga.—Railroad.—The McRae, Ocilla & Southwestern Railroad Co., lately reported (under McRae) as applying to the legislature for a charter, proposes to build a railroad from Thomasville to McRae.

Trinity, Texas.—Railroad.—John M. Hefley, president of the Trinity, Cameron & Western Railroad Co. (office, Cameron), referred to in last issue, writes that as soon as charter is secured a survey of the line will be made. The road is to extend from Trinity via Madisonville and Cameron to Granger.

Tuskaloosa, Ala.—Railroad.—The Montgomery, Tuskaloosa & Memphis Railroad Co. (office, Montgomery) has offered to complete its road to Tuskaloosa by October 1 provided the subscription of \$100,000 forfeited by the non-completion of the line at the specified time is renewed. The company also offers to complete the Tuskaloosa Northern Railroad to the Tuskaloosa county line if donated that property by the Tuskaloosa Coal, Iron & Land Co.

Virginia City, Va.—Railroad.—The Norfolk & Western Railroad Co. (office, Roanoke) proposes building branch lines from its Clinch Valley division to the various coal operations of the Virginia Coal & Iron Co., lately referred to, and is now surveying a line from Coeburn up Big Tom's creek.

At the annual meeting of the stockholders of the Roanoke & Southern Railroad at Roanoke last Tuesday, Mr. R. C. Hoffman, of Baltimore, was elected one of the directors. As Mr. Hoffman is vice-president of the Seaboard Air Line system, including the Georgia, Carolina & Northern Road, and as the Roanoke & Southern will cross that line at some point in the Carolinas, Mr. Hoffman's election may foreshadow a close alliance between the two roads.

A NEW railroad is to be built from Conroe, the terminus of the Montgomery branch of the Gulf, Colorado & Santa Fe, to the Ironwood crossing of the Trinity river, from which point will radiate branches into the extensive yellow pine districts of Southeastern Texas and Southern Louisiana. It is estimated that in the 40 miles between Conroe and Trinity river there are 1,500,000,000 feet of timber, equal to 125,000 car loads of lumber. This road, known as the Texas, Louisiana & Eastern, is said to have the backing of both the Atchison and the Illinois Central Railroads, each of which will profit by its construction.

The Pioneer Iron-making Town of Texas.

[Special Cor. MANUFACTURERS' RECORD.]

NEW BIRMINGHAM, TEXAS, Sept. 2, 1891.

Texas is now assuming importance as an iron-producing State, and this city, the pioneer iron town of the State, seems likely to be the manufacturing city of Texas. Its claim to distinction as the finest iron-producing town was brought out and emphasized in an editorial published in the MANUFACTURERS' RECORD in the spring of 1889, just after a visit to the locality by one of the proprietors of the paper. The following extract is taken from that editorial:

"New Birmingham will be forever notable as the pioneer iron-making town in the State, and when Texas shall have become an industrial empire, great in manufactures as it is now in agriculture, among the cities scattered over its wide area built on manufactures, New Birmingham will enjoy the interesting distinction of having been the leader in industrial achievement, the first to attract attention in a practical way to the iron resources of the State, and the first to seek to utilize them."

New Birmingham was established three years ago when everything was on a boom and lots sold like hot cakes. It has, however, shown its stability, and to day stands up on its merits of producing and selling iron at a profit. Our iron is being used by several car wheels companies in this State and St. Louis, and is pronounced superior to all irons used for the same purpose, the wheels standing tests of 100,000 miles compared to 80,000 from the best Pennsylvania iron.

The city lies in the center of about 70,000 acres of iron ore of the best quality of brown hematite, averaging about 50 per cent metallic iron. The iron ore lies on the top of all the hills, and has only to be stripped and broken with hand tools, occasionally a small blast being required to loosen it. It runs from 1½ to 4 feet thick. The cost of laying ore down at the furnace is about 50 cents per ton; it is expected to reduce even this cost when the new tramway is laid down.

Our half million acres of virgin forest guarantees us a perpetual supply of charcoal at very reasonable rates. The timber lands of the county contain 96 varieties of commercial wood, averaging 10,000 to 12,000 feet per acre.

The county has also large deposits of hiquite, ochre, glass sand, green marl, kaolin, fire and common brick clays. Numerous white sulphur, chalybeate and alum springs abound, and this section of the State is to-day an ideal health resort. Doctors and druggists find it hard to make a living. The New Birmingham Iron & Improvement Co., of Texas, which is developing the town, has a paid-up capital of \$3,500,000, and is in an excellent financial condition. It is made up principally of wealthy New Yorkers and English capitalists, who have brought about the stupendous developments at Middlesborough, Ky. This company is now employing 271 men, and paying from \$15,000 to \$20,000 per month for wages and improvements. Many of the men are employed in the Tassel Belle furnace, which is now turning out 40 to 50 tons of pig iron per day. A 25 ton pipe foundry will go into operation sometime this fall, and the Star and Crescent, a 50-ton furnace, put up by New Orleans capitalists, now nearly completed, will surely go into blast in October.

The demand for houses is extraordinary, and there are none to be had. A building company just organized, proposes to put up 50 to 75 at the earliest possible date. Contrasted with the dullness in many other Southern towns, the rush, push and enterprise here is phenomenal.

Parties are negotiating for the immediate

erection of a rolling mill and foundry and machine shop.

Our hotel is one of the finest in the State. It is finished in native, curly pine, and has large and cool rooms, electric lights, and all modern improvements. Our streets are lighted with electricity, and we have a street railway.

It is confidently expected that the Texas Trunk Railway, recently acquired by the Huntingtons, will build through this way to connect with Rockland. The Omaha, Kansas Central & Galveston has its eyes on this town as a valuable place to tap on its way to Galveston.

THE recent advance in cotton, and the assurance of the largest grain crops for many years, have still further strengthened the position of the South in all business and financial matters, and everything indicates a very active winter and spring. The tendency of capital seeking investment must inevitably be Southward, for no other country possesses such wonderful resources, and nowhere else are the possibilities of profitable development so promising. The increasing importance of the South's foreign trade and the position of Southern ports as the future outlet for the grain of the West is illustrated by the fact that Galveston is to have a 1,000,000-bushel elevator and New Orleans one of 300,000 bushels capacity, while the grain trade at Norfolk has developed so rapidly that the elevator there has been unable to handle the business, and a floating elevator has been secured from New York, and even one of the big coal piers is being used in helping to transfer the immense traffic from the cars to the steamships, while some days ago the Norfolk & Western had nearly 600 grain-loaded cars on the track at Norfolk. This rapid growth of the export business of the South, added to the industrial development that has been going on for the last few years, will greatly enhance the prosperity of this whole section. New industrial enterprises are daily being organized, and as this is not a speculative period, they must all be of a solid character. Among the number reported in this week's issue of the MANUFACTURERS' RECORD are the purchase of 190 acres of land near Basic City, Va., as a location for powder and cartridge works, to employ, it is said, 500 hands; the organization of a \$400,000 phosphate company in Charleston; a \$1,000,000 improvement and development company in Fort Smith, Ark.; a \$25,000 quarrying company and a \$50,000 lumber company in Virginia; a \$50,000 brick company and \$50,000 coal company in Kentucky; a \$100,000 grate manufacturing company and a \$10,000 lumber company in Knoxville; a \$75,000 cottonseed-oil mill in Dallas, Texas; a \$75,000 company for shipping fish frozen in ice from Florida to the North; a \$30,000 lumber company in West Virginia; a \$50,000 manufacturing company and a large cold-storage warehouse in Baltimore. Many enterprises of smaller magnitude have been reported, and many, large and small, are being organized.

HON. CARROLL D. WRIGHT will begin in the October Popular Science Monthly a series of papers under the title "Lessons from the Census." In the first of these he sketches the changes in scope and methods which the United States census has undergone in the past 100 years, and shows that its immense growth has made it a somewhat clumsy machine. The series of articles on "American Industries" will be continued in the October number with a fully illustrated account of "The Manufacture of Steel" by William F. Durfee, giving the history of the industry from colonial times to the introduction of the Bessemer process.

Subscribe to the MANUFACTURERS' RECORD.

Southern Financial News.

NEW BANKS.

Alma, Ark.—A bank has been organized with L. C. Locke, president; W. W. Smith, vice-president, and J. A. Porter, cashier. It is to commence business October 1, and has a capital stock of \$30,000.

Atlanta, Ga.—The bill lately reported as introduced in the legislature incorporating the Maddox Rucker Banking Co. to succeed the firm of Maddox, Rucker & Co., has been approved by the governor and become a law. The bank has been organized with R. F. Maddox, president; J. W. Rucker, vice-president, and W. S. Peel, cashier. The capital stock is \$150,000.

Atlanta, Ga.—P. C. Clegg, S. W. Cone, C. R. Whitley, Lee Allen and W. A. Dodson are the incorporators of the Clegg Banking & Savings Co., reported in last issue as applying to the legislature for a charter. The capital stock is \$50,000.

Brewton, Ala.—The Bank of Brewton has been chartered by C. S. Sowell, J. M. Davison, H. T. Parker and others. The capital stock is \$100,000.

Cochran, Ga.—The Bank of Cochran, recently mentioned, has been chartered by the legislature.

Fort Worth, Texas.—The Merchants' National Bank, lately referred to, will probably soon resume business with M. T. Bradley as president. The capital stock is \$250,000.

Glencoe, Ky.—The bank mentioned in last issue has been organized with O. B. Yager, president, and W. E. Sullivan, cashier. The capital stock is \$35,000.

Harriman, Tenn.—The Harriman Bank & Trust Co. has been chartered with James McDowell, president; W. W. Blakely, vice president, and W. H. Parsons, cashier. The capital stock is \$50,000.

Jackson, Ga.—A bill incorporating the Jackson Savings Banking Co. having passed the legislature and been signed by the governor, has become a law.

Jug Tavern, Ga.—The bill incorporating the Bank of Jug Tavern, recently reported as introduced in the legislature, having passed that body and been signed by the governor, is now a law.

Key West, Fla.—The Dime Savings Bank of Key West has been established with G. W. Allen, manager.

Mason, Texas.—The Citizens' National Bank has changed its title to the First National Bank of Mason.

Paris, Ark.—The Bank of Paris has been chartered with P. B. Cox, president. The capital stock is \$50,000.

San Angelo, Texas.—The Citizens' National Bank, lately reported as to be organized by F. B. Gray and others, will succeed the banking firm of Veck, Sterrett & Co. The capital stock is to be \$200,000.

Social Circle, Ga.—The Bank of Social Circle, previously mentioned, has been chartered by the legislature.

Terrell, Texas.—A new bank is reported as being organized.

Velasco, Texas.—James A. Patton, B. Kiam, E. L. Combs and J. L. Watson, of Houston, and Oscar O. Nation, of Velasco, are the incorporators of the First National Bank of Velasco, reported in last issue as to be organized.

Augusta, Ga.—The Augusta Real Estate & Improvement Co. has declared a dividend of 7 per cent.

Baltimore, Md.—The Baltimore Traction Co. will, it is stated, issue \$1,200,000 of bonds for the extension of its cable system.

Birmingham, Ala.—The sale of \$200,000 of 5½ per cent. bonds, lately reported as made, is said to have fallen through, and a second sale effected, with Blake Bros., of New York, as purchasers.

Bristol, Tenn.—Philadelphia (Pa.) parties have, it is stated, purchased \$62,000 of Bristol (Tenn.) bonds.

Carrollton, Ga.—The Interstate Abstract Co. is to be chartered by E. G. Kramer, W. W. Pitts, S. E. Grow and others. The capital stock is \$10,000.

Florence, S. C.—The Florence Tobacco Co. contemplates the issuance of bonds.

Gadsden, Ala.—The Gadsden Building & Loan Association will, it is stated, pay a dividend of 11 per cent.

Gaffney City, S. C.—The city has voted to issue \$20,000 of water works bonds. The mayor can give particulars.

Hickory, N. C.—It is stated that the trustees of the Bank of Hickory have paid another dividend of 10 per cent, making a total of 55 per cent.

Jacksonville, Fla.—The organization of a home fire insurance company is being discussed.

Jacksonville, Fla.—John King, special master in chancery, notifies holders of bonds or coupons of the Florida Southern Railway Co., secured by a certain mortgage given to the American Loan & Trust Co., dated October 1, 1885, or a mortgage to the New England Trust Co., dated July 1, 1883, to

present said bonds or coupons to him at the First National Bank of Florida, in Jacksonville, on or before October 1, 1891, for participation in the benefits of the final decree in said cause.

Lithonia, Ga.—The town has applied to the legislature for authority to issue \$5,000 of school bonds. The mayor can give particulars.

Roanoke, Va.—The Woodstock Investment Co. has been chartered with F. B. Kemp, president; M. L. Walker, vice-president, and A. L. Jamison, secretary. The capital stock is \$50,000.

Sparta, Ga.—The issuance of \$15,000 of bonds for school purposes has been decided upon. The mayor can give particulars.

Staunton, Va.—The Staunton Savings Bank has declared a semi annual dividend of 3 per cent.

Weatherford, Texas.—The city has issued \$5,000 of street improvement bonds. The mayor can give information.

Wheeling, W. Va.—F. P. Jepson, P. B. Dobbins and J. E. Hughes, commissioners, will receive proposals until October 1 for 100 \$100 bonds, 61 \$500 bonds and 29 \$1,000 bonds, all bearing interest at 4½ per cent.

Wilmington, N. C.—The Wilmington Savings & Trust Co. has declared a semi annual dividend of 3 per cent.

A SYNDICATE of Denver (Col.) capitalists is reported to have purchased some 15,000 acres of land at Morgan's Point, on the Gulf coast of Texas, not far from Houston, and to have paid \$50,000 on account of the investment. The purpose is said to be the creation of an attractive seaside city which shall eventually be developed into a place of commercial importance. It is rumored that officers of the Missouri Pacific and of the Missouri, Kansas & Texas Railroads are members of the syndicate, and that a railroad will be built between Houston and Morgan's Point by an extension of the Houston Belt & Magnolia Park Road.

A POSTOFFICE has been established at the new town of North Wilkesboro, N. C., now being built by the Winston Land & Improvement Co., of Winston, N. C.

Baltimore Stock Exchange Quotations.

Reported by ALEXANDER BROWN & SONS, Bankers, Baltimore.

BALTIMORE, September 9, 1891.

BID. ASKED.	
Virginia 3's, new.....	61½
Virginia 10-40 Coupons, N. F.....	25
N. Carolina 4's.....	97½
Ga. Car. & N. 5's.....	100½
Atlanta & Char. 1st 7's.....	118
Atlanta & Char. Income 6's.....	103
Col. & Green 1st 6's.....	101
Col. & Green 2d 6's.....	78
Va. Midland, 2d 6's.....	114
Charlotte, C. & Aug. 1st 7's.....	114½
West Va. Central 1st 6's.....	106½
Ga. Pacific 1st 6's.....	100½
Ga. Pacific 2d.....	62
Cape Fear & Y. Valley 6's, A.....	101
Cape Fear & Y. Valley 6's, C.....	101½
Consolidated Gas Stock.....	44
Consolidated Gas Bonds 6's.....	112½
Canton Co.....	50

Foreign Exchange Quotations.

ALEXANDER BROWN & SONS.

BALTIMORE, September 9, 1891.

Sterling.—Easier.		Commercial.	
60 days.....	48½	48½	48½
3 days.....	48½		
Francs.		Commercial.	
60 days.....	52½	52½	52½
3 days.....	52½		
Reichmarks.		Commercial.	
60 days.....	95	94	94
3 days.....	95		
Guilders.		Commercial.	
60 days.....	39½	39½	39½
3 days.....	40		

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WANTED.—POSITION AS SUPERINTENDENT OF FERTILIZER WORKS. Nine years' experience; understands manufacture of Sulphuric Acid from pyrites or sulphur, use and management of Glover and Gay Lussac Towers. Address "R. E. E." care MANUFACTURERS' RECORD.

WANTED.—By a Man who has been for years superintendent of two of the largest factories and building concerns in the South a position as Mill Manager or Building Superintendent. Is a good draughtsman and thorough mechanic. Can furnish best of references, including present employers. Virginia preferred. Address A. D., care Manufacturers' Record.

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DESCRIPTION OF PROPERTY.

437½ acres of land; 100 of this amount fine bottom land, about one-half of total amount cleared, balance in woods. Six good tenement houses on place and number of homes and other buildings, including blacksmith shop, one large water cotton gin and one three-story merchant mill now running profitably and in good repair; grows 20 bushels corn per hour and 15 bushels wheat per hour. The water-power finest in Georgia, having a fall of 75 feet in distance of 300 yards. No trouble in case of freshets, and supply inexhaustible in dryest weather; present dam four feet high. Finest site on earth for factory, and millions of best granite to build or quarry for market. Situated three miles west of the growing and enterprising town of Thomaston, Upson county, Ga., where the new trunk line Macon & Birmingham passes a branch of the Central Railroad. A survey will be made in a few days from Thomaston to this great water-power, and by following two branches there is only one short cut to be excavated, and the road can be built at a small cost. Price of property, including all improvements, \$15,000 cash. Titles perfect. Apply to

THOMAS M. MATTHEWS,
Thomaston, Ga.

A Splendid Bargain.

I have for sale THIRTY ACRES of Land, just 1½ miles from the Postoffice and center of the city, at the very low price of \$700 per acre; ¼ cash, and balance on time at 8 per cent. interest. This property is immediately on the Electric Car Line to Riverside Park, and may be divided into 200 residence lots, worth on an average of \$200 each.

Property will be withdrawn from the market after 1st October next if not sold.

ELIAS EDMONDS,

Office, Room 22 French Building,

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JOHN L. WILLIAMS & SON, BANKERS.

—RICHMOND, VA.—Our Manual of Investments for 1890, the largest work of the kind published by any banking house in America, (406 pages, octavo, cloth,) may be had without charge by clients, correspondents and those expecting to do business with us; by others at \$2 per copy.

Richmond Stock Exchange Quotations.

Reported by JOHN L. WILLIAMS & SON, Bankers, Richmond.

RICHMOND, VA., September 8, 1891.

BID. ASKED.	
North Carolina 4's, 1910.....	97½
North Carolina 6's, 1910.....	123
Virginia New 3's, 1932.....	63½
Danville 5's.....	64½
Lynchburg, Va., 5's, 1915.....	102
Petersburg, Va., 5's, 1918.....	104
Norfolk, Va., 5's, 1911.....	106
Richmond, Va., 5's, 1922.....	106½
Atlanta & Charlotte Ry., 1st 7's, 1907.....	117
Atlanta & Charlotte G'd 6's, 1900.....	104
Char., Col. & Aug. R. R. Gen. 6's, 1932.....	104
Georgia Pacific Ry. 1st 6's, 1922.....	100½
Georgia Pacific 2d 5's, 1923.....	59½
Georgia Incomes, 5's.....	15
Petersburg Railroad Stock.....	80
Petersburg Railroad Class A 5's, 1926.....	105
Petersburg Railroad Class B 6's, 1926.....	106
Rich. & Danville R. R. Gold 6's, 1915.....	104
West. N. Car. R. R. G'd 6's, 1914.....	97
West. N. Car. 1st 6's, C, 1914.....	94
Northwestern N. Car. R. R. 1st 6's.....	92½
Atlanta & Charlotte R. R. Stock.....	90
North Carolina Railroad Stock.....	92
R. F. & Pot. R. R. Div'd Obligations.....	111
Virginia Midland Railway Stock.....	111
Sloss Iron & Steel Co. Stock.....	111
Sloss Iron & Steel Co. 1st 6's, 1917.....	111
Sloss Iron & Steel Co. 2d 6's, 1918.....	111

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Issue Commercial and Travelers' Letters of Credit.

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Brass and Wire Work. 215 Wabash Av. A. H. Andrews & Co., Chicago.

PROPOSALS.

SEALED PROPOSALS will be received at the office of the Custodian of the U. S. Post-office, Courthouse, &c., Building at Baltimore, Md., until 12 M. on the 22nd day of September, 1891, for all the labor and materials required to fit up a Prisoners' Room in the fourth story of the above named building, in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Supervising Architect, Treasury Department, Washington, D. C. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Fitting up a Prisoners' Room in the U. S. Postoffice, Courthouse, &c., Building, Baltimore, Md.," and addressed to W. W. JOHNSON, Custodian. August 24, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 6th day of October, 1891, for all the labor and materials required and fixing in place complete the Low-pressure, Return-circulation, Steam Heating and Ventilating Apparatus, Power Boiler, Pump, &c., in the U. S. Custom-House, &c., building at Galveston, Texas, in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the Superintendent at Galveston, Texas. Bids will also be considered for any other system of heating and ventilating in lieu of the above, and parties proposing to supply such must submit with their proposal plans and full specification on for same. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements and meaning of this invitation, or for any heating and ventilating apparatus not satisfactory to this Department. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the Low-pressure, Return-circulation, Steam Heating and Ventilating Apparatus (or otherwise, as the case may be) Power Boiler, Pump, &c., for the U. S. Custom-House, &c., building at Galveston, Texas," and addressed to W. J. EDBROOKE, Supervising Architect.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 9th day of October, 1891, for all the labor and materials required for the Excavation, Concrete Foundations, Stone and Brick Work, Iron and Wood Floor and Roof Construction, Roof Covering, &c., of the U. S. Postoffice Building at Jackson, Michigan, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at Jackson, Michigan. Each proposal must be accompanied by a certified check for not less than 2% of the amount of proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Excavation, Concrete Foundations, Stone and Brick Work, Iron and Wood Floor and Roof Construction, Roof Covering, &c., for the U. S. Postoffice Building at Jackson, Michigan," and addressed to W. J. EDBROOKE, Supervising Architect. September 7, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 29th day of September, 1891, for all the labor and material required for the Approaches to the U. S. Courthouse and Postoffice Building at Chattanooga, Tenn., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent at Chattanooga, Tenn. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for the Approaches to the U. S. Courthouse and Postoffice Building at Chattanooga, Tenn.," and addressed to W. J. EDBROOKE, Supervising Architect. August 29, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 28th day of September, 1891, for all the labor and materials required for the Iron Stairs, Iron Work, &c., of Elevator Shaft for the United States Courthouse, Postoffice, &c., building at Denver, Colorado, in accordance with drawings and specification, copies of which may be had on application at this office or the office of the Superintendent at Denver, Colorado. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Iron Stairs, Iron Work, &c., for the U. S. Courthouse, Postoffice, &c., building at Denver, Colorado," and addressed to W. J. EDBROOKE, Supervising Architect. August 7, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 24th day of September, 1891, for all the labor and materials required for certain Miscellaneous Repairs and Decorative Painting to the U. S. Custom-House Building at Charleston, South Carolina, in accordance with the specification, copies of which may be had on application at this office or the office of the Superintendent at Charleston, S. C. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for Miscellaneous Repairs to the U. S. Custom House at Charleston, S. C.," and addressed to W. J. EDBROOKE, Supervising Architect. August 24, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 7th day of October, 1891, for all the labor and materials required for the Erection and Completion (except Heating Apparatus) of the U. S. Postoffice Building at Hoboken, N. J., in strict accordance with the drawings and specification, copies of which may be had on application at this office or at the office of the Superintendent at Hoboken, N. J. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the erection and completion (except Heating Apparatus) of the U. S. Postoffice Building at Hoboken, N. J.," and addressed to W. J. EDBROOKE, Supervising Architect. September 7, 1891.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 25th day of September, 1891, for all the labor and materials required for the Approaches to the U. S. Courthouse and Postoffice Building at Statesville, N. C., in accordance with the drawing and specification, copies of which may be had on application at this office or the office of the Superintendent at Statesville, N. C. Each bid must be accompanied by a certified check for a sum not less than 2% of the amount of the proposal. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for the Approaches to the U. S. Courthouse and Postoffice Building at Statesville, N. C.," and addressed to W. J. EDBROOKE, Supervising Architect. August 28, 1891.

UNITED STATES ENGINEER OFFICE, WASHINGTON, N. C., September 3, 1891.
SEALED PROPOSALS for \$75,000 of dredging in Ocracoke Inlet, N. C., will be received at this office until 11 M. on October 20, 1891. The attention of bidders is specially invited to Acts of Congress, approved 26th February, 1885, and 23d February, 1887, volume 23, page 332, and volume 24, page 414, Statutes at Large. All information will be furnished by W. H. BIXBY, Captain of Engineers.

SOUTHERN LOAN
BOND INVESTMENTS.

[Under this head the MANUFACTURERS' RECORD will publish announcements, not exceeding ONE DOLLAR, four times free of charge. Only offerings of real estate loans and municipal, county and other bonds, accompanied by specific statement of amount, time, rate of interest and security, will receive free insertions in this column.]

WANTED \$100,000 TO BUILD 200 houses. Security, first mortgage, 10% guaranteed, payable semi-annually. Address L. C. CHANCE, Manager, Cumberland Gap, Tenn.

MONEY WANTED.—10% GUARANTEED by first mortgages on improved property. Address L. C. CHANCE, Manager, Cumberland Gap, Tenn.

WANTED \$6,000 FOR FIVE YEARS AT 7%, secured by first mortgage on valuable business property in Roanoke that cost \$11,000 over a year ago; now worth \$16,000. Owner intends building. Address W. S. FOLE, Roanoke, Va.

\$7,500 WANTED FOR ONE YEAR on property worth from four to six times amount desired. Located in one of the richest counties in Southwest Virginia. Parties wishing the loan can give ample assurance of ability to meet payment. Interest paid quarterly if desired. Address A. care Manufacturers' Record.

8% GOLD WATER WORKS BONDS. THE undersigned offers for sale, at par and accrued interest, \$15,500 in 8% gold bonds, secured by first mortgage, in trust, on water works which cost more than double the amount of its bonded debt, and earned in 1890 18% on its capital stock, besides expenses and interest on bonds. Principal and interest payable in gold in New York; the interest semi-annually. An unquestionably safe and desirable investment. Full details on application. WM. P. FARRISH, Mills Building, 35 Wall Street, New York.

WANTED.

Location for Handle Factory Working 50 to 60 hands and consuming annually 3,000 cords of white hickory.

CAPITALISTS

to take half interest in property of 60 acres, with blast furnace and rolling mill, on trunk line railway and controlling an almost unlimited water-power. Fine location for large flouring mill.

Loan of \$10,000 to \$15,000 on established manufacturing plant worth \$40,000, doing good business and free of all encumbrance.

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57 Broadway, New York.

WANTED.

Mineral Property and Town Site.

We have a special inquiry for a large boundary of well-timbered mineral land, with iron, coal and lime in cheap juxtaposition, and suitable for a great manufacturing center.

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LANDS, SECURITIES & INDUSTRIAL ENTERPRISES,
15 Whitehall Street, Room 18,
NEW YORK.

GOLD MINE.

A loan of \$20,000 wanted to put the necessary machinery on one of the richest free milling quartz mines in California. The money will be refunded in one year. As a bonus, will give one-quarter of the capital stock of the Co. This is a bonanza. No Brokers.

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I would be glad to correspond with parties who wish to move Manufacturing Plants already established, or to establish new plants in the rapidly developing iron and coal regions of the South. I can offer liberal inducements in the way of free sites, subscription to capital stock, or secured loans at low rates of interest, with choice of location.

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Handsome Sites for Residences. Investments Made Which Will Pay Handsome Profits.

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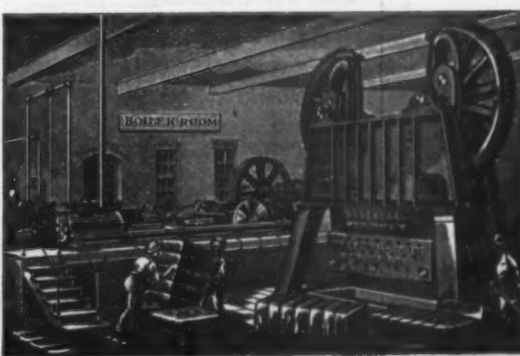
Will sell, exchange for salable merchandise, mortgage for necessary funds for working expenses, or make working arrangement on shares, commission or royalty, 300 acres of the best phosphate land in Florida situated on a navigable river and showing by analysis from 73 to 84 per centum of phosphate of lime 23 pits sunk from 7 to 35 feet fail to reach the bottom of the bed.

Also a gold property in North Carolina of 300 acres, well watered and timbered land, on which are 11 fissure veins from one to four feet wide and each about a mile long, ore assaying \$33 per ton. Will be sold outright, mortgaged for necessary working expenses, or arrangement will be made with suitable parties to work on shares, commissions, royalty or otherwise.

On hand for sale, a choice selection of properties, consisting of agricultural, mineral and timber lands; gold, silver, iron, coal and mica mines; breweries, mills, factories, textile and other manufacturing; developed, undeveloped and partly developed industrial enterprises, and county, municipal and corporate securities.

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CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Ashville—Saw Mill.—Pink Dobbins is reported as having purchased and as to operate the saw mill of J. Chandoir.

Birmingham—Publishing.—S. D. Siler, J. M. Webb, J. C. Seale and others have incorporated the Siler Book & Stationery Co. to carry on a general book, stationery and publishing business. The capital stock is \$10,000.

Bridgeport—Pipe Works.—The Chattanooga Foundry & Pipe Works, of Chattanooga, Tenn., has completed its branch pipe works at Bridgeport, reported previously. The plant has a daily capacity of 100 tons.

Decatur—Heading and Stave Factory.—W. D. Roberts, of Chattanooga, Tenn., will, as reported in our last issue, erect a heading and stave factory in Decatur; will operate as the Decatur Stave Works, and have capacity of 20,000 pieces per day.

Decatur—Timber Land.—John P. Streight & Co., of Nashville, Tenn., have purchased the timber on 5,000 acres of land near Decatur.

Fayette C. H.—Brick Works.—Harkins & Bankhead have, it is stated, established brick works with a capacity of 10,000 brick per day.

Florence—Street Paving.—It is proposed to issue \$100,000 of bonds for the purpose of macadamizing the principal roads in Colbert and Lawrence counties. T. L. Cannon can give information.

Florence—Shoe Factory.—It is stated that a party has contracted to put the Florence Shoe Factory in operation.

Gurley—Pencil Factory.—The Eagle Pencil Co. is erecting an additional building to its pencil factory, as reported last week; has also put in band saw.

Huntsville—Grain Elevator.—Halley, Dillard & Lile are reported as to erect a grain elevator.

Midland City—Publishing.—H. G. Townsend has started the publication of the Midland Clipper, as reported last week.

Montgomery—Iron Works.—The Montgomery Iron Works are reported as being enlarged.

Opelika—Fertilizer Factory and Oil Mill.—H. C. Jernigan and A. D. Lipscomb have, as reported last week, purchased the Opelika cottonseed-oil mill and the Lee fertilizer works, and will operate same.

Scottsborough—Brick Works.—Lawler & Jones have, it is stated, established brick works.

Washington County.—A German syndicate is reported as having purchased a large tract of land in Washington county and as to establish an extensive colony.

ARKANSAS.

Batesville—Distillery.—R. W. Earnhart, recently mentioned, is rebuilding his distillery.*

Dodd City—Onyx Mine.—A. L. Dirst and others are developing an onyx mine at Dodd City.

Dodd City—New Town.—It is said that a Mr. Hobart, representing a syndicate, has purchased 1,500 acres of land adjacent to Dodd City for a town-site.

Dodd City—Copper, Lead and Zinc Mines.—H. S. Dodd is developing lead, copper and zinc mines at Dodd City.

El Dorado—Saw Mill.—O'Hear & Love will, it is stated, rebuild their saw mill, reported in this issue as burned.

Fayetteville—Broom Factory.—J. A. Montgomery has, as reported recently, purchased the

Fort Smith broom factory and will consolidate it with his Fayetteville factory.*

Fort Smith—Land, etc.—The Fort Smith Land & Investment Co. has been incorporated with W. M. Craven, president. The capital stock is \$1,000,000.

Hot Springs—Electric-light Plant.—The Hot Springs Electric Light Co. has, it is stated, put new machinery in its electric-light plant.

Hot Springs—Tin Mine.—J. V. Ryan, R. F. Looney, J. H. T. and H. B. Martin, of Memphis, Tenn., and A. C. Titner, of New York, have, it is stated, secured control of 1,700 acres of tin lands in Garland county, and have organized for the purpose of developing same.

Wrightsville—Lumber Mill.—William Farrell & Co., operating a lumber mill, have incorporated as the William Farrell Lumber Co. with a capital stock of \$250,000.

FLORIDA.

Anthony—Phosphate Mines.—The Deacon Phosphate Co. is developing phosphate mines at Anthony.

Anthony—Phosphate Mines and Works.—M. Twillier, representing several French companies, has, as reported lately, purchased for about \$200,000 the phosphate properties of the Peninsular Phosphate Co. The property includes 1,000 acres of land and phosphate plants at Sparr and Anthony.

Bartow—Phosphate Mines and Works.—The Terracina Phosphate Co., recently reported (under Tampa) as incorporated to develop phosphate mines, will at once erect a 200-ton phosphate plant on its 400 acre tract of phosphate land near Bartow.

Bartow—Phosphate Mines and Works.—The Tennessee-Florida Land Co., of Chattanooga, Tenn., as reported last week, has purchased and will develop 107 acres of phosphate land near Bartow. The company's intention is to erect a 100-ton phosphate plant.*

Brooksville—Phosphate Mines and Works.—The Virginia-Florida Phosphate Co. has, as stated recently, completed its phosphate plant at Wilnot and commenced operations; capacity 100 tons per day.

Cedar Keys—Preserving Factory.—The Gibbs Preserving Co., of Baltimore, Md., states that it has no idea of removing its factory from Baltimore, as reported last week.

Eustis—Boot and Shoe Factory.—D. Henderson, of Brockton, Mass., is reported as to start a boot and shoe factory in Eustis.

Florida—Phosphate Lands.—H. N. Mann, of Chicago, Ill., has purchased 470 acres of phosphate land from the Tampa Real Estate Exchange for \$23,000.

Fort Meade—Phosphate Mines and Works.—The United States Phosphate Co. is now erecting the phosphate plant recently mentioned. It will have a daily capacity of 100 tons and will cost \$25,000.

Fort Meade—Box Factory.—Charles Adams and Horace White are reported as to erect a factory for the manufacture of orange boxes.

Jacksonville—Looking-glass Factory.—Shaw & Sons have started a looking-glass factory, as reported recently.

Jacksonville—Phosphate Mines and Works.—The National Peace River Phosphate Co., previously reported as incorporated to develop phosphate mines, etc., has erected a phosphate plant at Janizay and put same in operation.

Key West—Crematory.—The crematory recently mentioned as provided for by the new city charter will be built during the coming winter. For information address the mayor.

Lake Ogden—Saw Mill.—J. W. Dowling, lately mentioned, has just completed a new saw mill.*

Louraville—Phosphate Mines and Works.—It is reported that John Chipman will probably erect a \$50,000 plant for the purpose of developing phosphate mines at Louraville.

Myers—Iron and Woodworking Establishment.—Forquer & Tooke will erect, as stated recently, an iron and woodworking establishment.

New River—Phosphate Mines.—S. H. Page has, it is reported, purchased 1,000 acres of phosphate land at New River.

New River—Phosphate Mines.—S. R. Rentz will, it is reported, erect machinery and develop phosphate mines.

New Smyrna—Bridge.—A. J. McCreery, J. L. McCrary, R. S. Nelson and others have incorporated the New Smyrna Bridge & Investment Co. to build a toll-bridge across the Hillsborough river.

Orange City—Water Works.—A system of water works is reported as to be constructed.

Palatka—Publishing.—E. C. Post, mentioned last week (under Tampa), will publish a newspaper in Palatka to be called "Tropical Florida."

Punta Gorda—Cigar Factory.—As reported last week, the El Corojal Cigar Manufacturing Co. will start a cigar factory.

Sparr—Phosphate Mines.—The Plate Rock Phosphate Co. is developing phosphate mines near Sparr.

St. Petersburg—Saw Mill.—G. L. King has remodeled his saw mill, mentioned last week, and put in new machinery.*

Tampa—Lumber Mill.—The Tampa Lumber Co. is reported as to put in new machinery.

GEORGIA.

Acworth—Bridge.—J. M. Stone will receive bids until October 3 to furnish material and build a bridge 130 feet long across Alatoona creek, near Acworth.

Acworth—Gold Mine.—The Acworth Land Co. is reported as to shortly commence the development of the Tippen gold mine in Cherokee county.

Atlanta—Sewing-machine Factory.—The Brosius Sewing Machine Co. will, it is stated, double the capacity of its sewing-machine factory.

Ball Ground—Marble Mill and Shoe Factory.—A marble mill and shoe factory is reported as to be established.

Bowdon—Cotton Gin.—Downes & Jones are erecting a new ginnery.

Bowdon—Cotton Gin and Flour Mill.—W. D. Lovorn is enlarging his flour mills and cotton ginnery.

Brunswick—Phosphate Mines.—Several phosphate mines are reported as to be developed at Brunswick.

Cedartown—Iron Mines, Land Improvement, &c.—J. S. Fullwood, B. M. Davenport, J. M. Stewart and others have incorporated the Fullwood Mineral Springs Co. to develop and improve the John S. Fullwood Mineral Springs, develop iron mines, operate saw mills, etc.

Cordele—Lumber Mill.—The Rivers Lumber Co., operating a lumber mill, has organized as the Pine City Lumber Co. with P. C. Clegg, president, and A. M. Hussey, vice-president. The capital stock is \$75,000.

Crawfordsville—Granite Quarries.—W. M. Willingham is reported as to develop granite quarries near Crawfordsville.

Dublin—Barrel Factory and Oil Mill.—A barrel factory and oil mill will, it is stated, be established.

Fannin County—Mica Mines.—The Chattanooga and North Georgia Mica & Mining Co., reported last week as incorporated to develop mica mines in Fannin county, has for its president W. D. L. Robbins; for vice-president, V. W. Leavitt, and for secretary, B. H. Frazier; office, 205 Richardson Building, Chattanooga, Tenn.

Jackson—Cottonseed oil Mill.—The stock company previously reported as organized to erect a cottonseed oil mill will be known as the Jackson Oil Mill Co. with F. S. Ethridge, president, and Meade Hindrick, secretary.

Jeffersonville—Artesian Well.—An artesian well is to be sunk.

Jeffersonville—Buggy and Wagon Factory.—A buggy and wagon factory is reported as to be established.

Jeffersonville—Planing Mill.—A planing mill will be erected, it is reported.

Kennesaw—Bridge.—J. M. Stone, of Acworth, will receive bids until October 3 to furnish material and build a bridge 60 feet long across Noonday creek, near Kennesaw.

Kensington—Washing-machine Factory.—Morton Bros. have, as recently stated, started the manufacture of N. J. Sweeney's patent washing machine.*

Louvale—Mill, &c.—A bill has been introduced in and passed the legislature to incorporate the Louvale Milling & Transportation Co.

Milledgeville—Bridge.—D. B. Sanford will receive bids until October 3 for the building of a bridge 120x16 feet across Fishing creek on the Midway road.

Rome—Improvements.—A deal is pending for extensive improvements at New Rome, as stated last week.

Sycamore—Stave and Shingle Mill.—A. G. De Loach has, as reported previously (under Atlanta), started a stave, shingle and lath mill.*

Tilton—Grist Mill, Gin &c.—C. C. Brown, recently referred to, is building anew his entire plant; when completed will have in operation grist mills, saw mill and cotton gin.*

KENTUCKY.

Corbin—Saw Mill.—G. E. Wilcox and Philip Thompson, of Brooks, mentioned last week (under Louisville), have recently erected a saw mill near Corbin.*

Frankfort—Carriage and Harness Factory.—The establishment of a carriage and harness factory is talked of.

Glasgow—Flour Mill.—Thomas Nichols has, it is stated, put roller process machinery in his flour mill.

Louisville—Furniture Factory.—H. Wolke & Bro. have erected new building for their furniture factory, as reported last week.

Maysville—Grain Elevator.—Carr & Tolle contemplate the erection of a grain elevator.

Middlesborough—Furniture Factory.—The Middlesborough Furniture Co. will, it is stated, put new machinery in its furniture factory and erect an additional building to same.

Oil City—Oil Refinery, &c.—R. J. Buchanan, Pittsburg, Pa., and others are reported as organizing a stock company for the purpose of purchasing the oil refinery at Oil City, sinking oil wells, etc.

Shelbyville—Water Works.—The city desires a company to construct water works system; water to be obtained from stream three-fourths of a mile from city. Address G. A. Armstrong, Jr.*

Uniontown—Flour Mill.—Mr. Rathman has, it is stated, put roller process machinery in his flour mill.

LOUISIANA.

New Orleans—Machine Shop.—C. M. Fash has petitioned the city council for authority to erect a blacksmith shop.

New Orleans—Publishing.—The Louisiana Printing & Publishing Co., mentioned last week, is putting in new presses, stereotyping machinery, etc.

New Orleans—Grain Elevator.—The Illinois Central Railroad Co. (office, Chicago, Ill.) is reported as to erect a grain elevator at New Orleans with a capacity of 300,000 bushels.

New Orleans—Land Improvement, etc.—The Louisiana Land & Fisheries Co., Limited, has been incorporated to improve and develop lands and water rights; to cultivate and develop the fish and oyster industry, etc. The capital stock is \$10,000.

New Orleans—Wharf Construction.—The Louisiana Construction & Improvement Co. will, as stated last week, expend \$500,000 in constructing wharves, bulkheads and roadways.*

MARYLAND.

Baltimore—Electric-light Plant.—It is stated that a company is in process of formation to erect and operate the Edison electric-light plant previously referred to. The Edison General Electric Co., of New York city, can probably give information.

Baltimore—Cold-storage Plant.—The Baltimore City Cold Storage & Warehouse Co. has, it is stated, purchased for \$25,000 property on which it will erect a cold-storage plant.

Baltimore—Corset Factory.—As reported recently, the Bristol Corset Co., of Newark, N. J., and A. H. Brinkman & Co. have consolidated, and will operate as the Baltimore Corset & Novelty Works, having incorporated same with a capital stock of \$50,000.

Buckeystown—Plow Works.—G. J. Bukey, (cf Frederick; E. L. Keller and others have, as stated in our last issue, organized a stock company to establish plow works; will be known as the Buckeystown Plow Works.

Garland—Canning Factory.—George Wilkinson is reported as having enlarged his canning factory.

Garrett County—Coal and Timber Land.—The Kunkle tract of coal and timber lands in Garrett county has, it is stated, been sold for \$50,000 to parties who are developing it.

Towson—Electric light Plant.—The organization of a stock company for the purpose of erecting an electric-light plant is talked of. F. L. McAleese can give information.

MISSISSIPPI.

Enterprise—Cotton Mill and Iron Furnace.—As stated last week, the Enterprise Manufacturing & Development Co. has made arrangements for the construction of an iron furnace of 50 tons capacity and the erection of a cotton mill to cost \$500,000; work is to commence about January 1st.

Meridian—Novelty Works.—M. T. Kibby, of 615 Hazel street, Lansing, Mich., mentioned last week as corresponding relative to establishing novelty works at Meridian, states that he has not as yet definitely decided where he will locate his plant, and is ready to receive inducements for same.*

Meridian—Wagon Works.—The Queen City Manufacturing Co. has, as reported recently, purchased the Crisler Wagon Works at Starkville and will remove same to Meridian and put in operation.

Natchez—Coffin Factory.—H. Jacobs and others

have organized the Natchez Coffin Co. for the manufacture of coffins, caskets, etc.

Yazoo City—Ice Factory.—A stock company will, it is stated, be incorporated for the purpose of erecting an ice factory.

NORTH CAROLINA.

Burlington—Publishing.—George Terrell, of Durham, and W. E. Hay will publish a newspaper, as mentioned last week. It will be known as the Burlington Hawkeye.

Charlotte—Cotton Bagging and Tie Factory.—Margolins & Co. will, it is stated, establish a factory for the manufacture of cotton bagging and ties.

Dallas—Cotton Mill.—The Dallas Cotton Mill Co., mentioned last week, has purchased machinery for its mill for 2,680 spindle warp mill; electric-light plant may be put in.

Gastonia—Land Improvement.—W. L. Gallant and J. K. Dixon are reported as having purchased 19 acres of land from Albert Smith and Thomas Wilson and as to lay off into building lots and otherwise improve same.

Goldsboro—Bed-spring Factory.—It is reported that a factory for the manufacture of patent bed-springs will be established.

King's Mountain—Gold and Sulphur Mines. J. S. Phillips, of Charlotte, is reported as developing sulphur mines on the McAden property, near King's Mountain, and as to develop a gold mine on the same property.

New Berne—Ice Factory.—The New Berne Ice Co. will, as reported last week, put in machinery to double the capacity of its ice factory.

Prosperity—Gold Mine.—Bryan Tyson and others will develop a gold mine near Prosperity and are now erecting necessary machinery.

Raleigh—Ice Factory.—The Raleigh Plate Ice Co. states that it will most likely rebuild its ice factory, reported last week as burned.

Raleigh—Tobacco Factory.—Phillip Taylor is reported recently, erecting a plug tobacco factory. It will be 40x80 feet in size and four stories high.

Ramseur—Chair and Furniture Factory.—A. W. E. Caples has enlarged his chair factory, as stated last week; additional machinery has also been put in to manufacture furniture, harness, etc.

Salisbury—Gold Mine.—Negotiations are now in progress for the sale of the Barringer gold mine, mentioned in our last issue.

Statesville—Tobacco Factory.—It is reported that O. L. Williams, of Farmington, has made contract for the erection of a tobacco factory in Statesville.

Statesville—Tobacco Factory.—E. J. & A. G. Stafford, of Kernersville, have, it is stated, contracted for the erection of a tobacco factory in Statesville.

Tarboro—Knitting Mill.—J. F. Shackelford is reported as to enlarge his knitting mill.

Wilmington—Dredging.—W. H. Bixby, United States engineer office, Wilmington, will receive sealed proposals until October 20th for \$75,000 of dredging in Ocracoke inlet.

Wilmington—Rice Mill.—W. P. Oldham & Co. are changing their corn mill to a rice mill.*

SOUTH CAROLINA.

Alcolu—Telephone Line.—D. W. Alderman & Co. intend constructing a telephone line to miles long.*

Blacksburg—Iron Mines.—Baltimore (Md.) and Northern capitalists have, it is stated, made a proposition to the Magnetic Iron & Steel Ore Co. for the purchase or lease and development of its property.

Blacksburg—Printing Works.—J. T. Jones, C. P. Roberts, J. D. Kennedy and others have incorporated the Blacksburg Printing Co. with a capital stock of \$5,000.

Charleston—Artesian Well.—The Charleston Water Works Co. will sink another artesian well, as reported last week, having let contract for boring of same to J. P. Miller & Co., of Chicago, Ill., at \$44,000.

Darlington—Electric-light Plant.—The Darlington Electric Light Co. has, it is stated, put new machinery in its electric-light plant.

Florence—Printing Works.—J. H. Evans is reported as having established printing works in Florence.

Fort Mill—Cotton Mill.—The Fort Mill Manufacturing Co. will, it is stated, put new machinery in its cotton mill.

Gaffney City—Water Works.—The city has voted to issue \$20,000 of bonds for the construction of water works. The mayor can give information.

Gates—Saw Mill and Gin.—J. E. Gassaway has changed the location of his saw mill for the purpose of operating his cotton gin in connection with same.

Jackson Station—Cotton Gin.—R. S. Hankinson is reported as putting new machinery in his cotton gin.

Jacksonboro—Phosphate Mines.—W. L. Bradley, of Boston, Mass.; B. H. Rutledge, of Charleston, and others have incorporated the Carolina

Mining & Manufacturing Co. for the purpose of mining phosphates and preparing same for the market. The capital stock is \$400,000.

McColl—Cotton Mill.—The McColl Cotton Manufacturing Co., lately reported as organized to erect a cotton mill, has been incorporated by T. B. Gibson, A. W. Morrison, F. P. Tatum and others.

South Carolina—Saw Mill.—H. B. Bowen, of Easley, has, it is stated, purchased and will operate the saw mill of L. K. Kelly on Pea Ridge.

Sumter—Brick Works.—L. R. Jennings & Co. have started brick works, as reported recently.

Sumter—Canning Factory.—The establishment of a canning factory is talked of.

Sumter—Cigar Factory.—J. C. Eldredge, of Binghamton, N. Y., will, it is stated, establish a cigar factory in Sumter.

Yorkville—Spoke and Handle Factory.—The reorganization of the Yorkville Spoke & Handle Co. for the purpose of putting its plant in operation is talked of.

TENNESSEE.

Athens—Lath, Saw and Shingle Mill.—A. W. Prather & Co. are reported as erecting a lath and shingle mill near Athens, and as to operate a saw mill in connection with same.

Bristol—Steel Plant.—It is stated that the city will make a proposition to a Philadelphia (Pa.) party looking to the establishment of a steel plant in Bristol. The mayor can give information.

Chattanooga—Barrel Factory.—W. D. Roberts & Co. contemplate putting in a plant for circling tight-barrel heading either in Chattanooga or Decatur, Ala.

Ducktown—Copper Mines.—F. M. Hight, of Anniston, Ala., recently mentioned, has, with W. E. Horne, of Atlanta, Ga., leased copper mines at Ducktown; will develop at once.*

Harriman—Planing Mill.—H. J. and C. P. Flanders, of Lawrence county, N. Y., are reported as having purchased the Steece planing mill at Harriman and as to put new machinery in and operate same under the name of the Flanders Manufacturing Co.

Iron City—Iron Mines, Marble Quarries, etc.—According to a recent statement in these columns, a controlling interest in the Iron City Land Co. has been sold to a Chicago (Ill.) syndicate; it will acquire possession about October 15, and at once develop iron, marble and timber resources.

Jackson—Canal.—As stated last week, J. J. Williams has completed two surveys for the Mississippi and Tennessee river canal.

Jackson—Broom Factory.—H. A. Schaeffer is, as reported recently, endeavoring to organize a stock company to enlarge and operate his broom factory.*

Knoxville—Grate Factory.—G. R. Scates, S. H. George, J. W. Shields and others have incorporated the Ventilating Grate Co. to manufacture the patent ventilated grate of G. R. Scates. The capital stock is \$100,000.

Knoxville—Woodworking Factory.—L. C. Carter is president, and J. N. Bogart, secretary, of the Knoxville Woodworking Co., lately reported as incorporated to operate and improve the woodworking factory of J. C. Connor.

Knoxville—Candy and Gum Factory.—W. B. Trent is president, and Mr. Burke, vice-president, of the Knoxville Candy Manufacturing Co., previously reported as incorporated to manufacture candy and chewing gum.

Lawrenceburg—Power Plant.—The Lawrenceburg Land & Mineral Co. contemplates erecting a steam power plant to furnish power to small industries.*

Loudon—Lumber Boom.—The Tennessee River Boom Co., recently organized at Chattanooga, is reported as constructing its second lumber boom at Loudon at a cost of \$24,000.

Memphis—Cotton Compress Works.—Louisiana parties are investigating with a view of establishing works for the manufacture of cotton compresses in Memphis. Secretary Commercial Association can give information.

Memphis—Wheel Factory.—The organization of a company to erect a wheel factory is projected. Secretary of Commercial Association can give information.

Northville—Saw Mill and Timber Lands.—The Phillipsburgh Land Co. is reported as to erect a saw mill in Northville for the purpose of developing its timber lands.

South Watauga—Tannery.—The South Watauga Tanning Co. is the name of the company erecting the tannery previously mentioned.

Strawberry Plains—Flour Mill.—J. H. Sensabaugh & Sons have, it is stated, remodeled their flour mill to the roller process system.

Tennessee—Saw and Grist Mill.—R. Lane is reported as having erected a saw and grist mill at Lane's Ferry.

TEXAS.

Aransas Pass.—A Chicago syndicate has, it is stated, made a proposition to the Texas Land & Investment Co. to complete the works at Aransas

Pass, to increase the depth of water, to preserve the jetty, etc.

Belton—Artesian Well.—A stock company has, it is stated, been organized for the purpose of sinking an artesian well in the western portion of Belton.

Brasoria County—Bridge.—A wooden draw-bridge will be built across the Bernard river at Mim's old ferry, in Brasoria county.

Callisburgh—Canning Factory.—A stock company is reported as being organized for the purpose of erecting and operating a canning factory.

Cameron.—C. H. Yoe, C. A. Pitta, D. Kemp and others have incorporated the Union Cotton Yards with a capital stock of \$5,000.

Dallas—Oil Mill.—The Southern Cotton Oil Co., of Galveston, has applied for permit to erect a cottonseed-oil mill in Galveston.

Fort Worth—Lock Factory, &c.—Propositions have been made for the establishment of a pottery, lock factory and cotton gin at Fort Worth. Secretary Chamber of Commerce can give information.

Fort Worth—Malt Factory.—A Mr. Kamm, of Milwaukee, Wis., is considering the establishment in Fort Worth of the malt factory referred to in last issue.

Galveston—Grain Elevator.—The Galveston Wharf Co. is reported as to erect at once a grain elevator with a capacity of 1,000,000 bushels.

Galveston—Artesian Well.—The Galveston Land & Improvement Co. will, it is stated, sink two artesian wells.

Grady—Cotton Gin and Flour Mill.—C. A. Bains has removed his cotton gin and flour mill from Roby to Grady.*

Hondo City—Water Works.—A \$5,000 stock company has, it is stated, been organized for the purpose of constructing a system of water works.

McGregor—Water Works.—The McGregor Artesian Water Co., lately mentioned, has let contract for stand-pipe for its new water works.

Memphis—Flour Mill.—A 25-barrel flour mill is reported as to be erected.

Muenster—Cotton Gin.—Geer & Bier and Clint Gilbert are reported as having established a cotton gin.

Nona—Lumber Mill.—The Nona Mills Co. is reported as putting new machinery in and increasing the capacity of its lumber mill.

Palestine—Grist Mill and Gin.—B. F. Rogers will probably rebuild his cotton gin and grist mill, reported last week as burned.

Rogers—Artesian Well.—Lee Ater, J. N. Booker and others will, it is reported, organize a stock company for the purpose of sinking an artesian well.

Sugar Land—Sugar Refinery.—E. H. Cunningham will, as recently reported (under Richmond), erect a sugar refinery on his plantation in Fort Bend county. It will have a daily capacity of 300 barrels.

Victoria—Ice Factory.—The Victoria ice factory is reported as to be equipped with an entire outfit of new machinery.

Waco—Cottonseed-oil Mill.—The cottonseed-oil mill of the National Cotton Oil Co. has resumed operations under the management of F. E. Ripley.

Waco—Mattress Factory.—The Waco State Bank, Spanger Bros. and the Slayden Kirksey Woolen Mills are reported as having purchased the Waco mattress factory for \$5,210.

Weatherford—Street Improvements.—The city has issued \$5,000 of bonds for street improvements. The mayor can give information.

VIRGINIA.

Basic City—Powder and Cartridge Factory.—The Swift Powder & Cartridge Co., of Cincinnati, Ohio, is reported as having closed a deal with J. H. Rankin for 101 acres of land near Basic City, on which to erect a plant for the manufacture of powder and cartridges; the daily capacity of the mills to be 10,000 pounds of powder and 25,000 cartridges.

Buchanan—Brass Works.—The Franklin Brass Works, reported in this issue as burned, will, it is stated, be rebuilt at once.

Burkeville—Granite Quarries.—The Burkeville Granite Co., reported last week (under Roanoke) as incorporated, has leased granite quarries at Burkeville; will put in steam plant and develop same.

Charlottesville—Creamery.—J. W. Shalcross, of Maryland, has decided to erect the creamery in Charlottesville previously mentioned, and a stock company has been organized for the purpose of operating same.

Chesterfield—Saw Mill.—A Lush has purchased and will operate the A. L. Pullman saw mill, as previously reported.*

Clifton Forge—Saw Mill and Timber Land.—A. J. Acord has, it is stated, purchased large tracts of timber land in and around West Clifton Forge from the Chesapeake & Ohio Railroad Co., and will erect a saw mill for the purpose of developing same.

Dredging.—P. C. Hains, 601 15th street, Wash-

ington, D. C., will receive sealed proposals until September 21 for dredging in Occoquan creek, Va.

Gordonsville—Broom Factory.—A broom factory has, it is stated, been established.

Goshen—Car Works.—The Goshen Car & Railway Equipment Co., previously reported as to erect car works, has been reorganized with G. W. Talbot as president, and G. H. Pittawilson, vice-president.

Harrisonburg—Paint Mill.—W. S. Chatham & Co., of Roanoke, are reported as having purchased the Craney Island mill and water-power near Harrisonburg, leased the ochre beds on the old W. M. Sibert farm, and as to utilize the water-power and machinery in establishing a large ochre-paint mill.

Ivanhoe—Iron Furnace.—The New River Mineral Co. is refining its iron furnace, as reported last week.

Lexington—Stone Quarries.—The Lexington Quarry Co., lately reported as incorporated to develop stone quarries, etc., has a maximum capital stock of \$25,000. J. D. H. Ross is president, and J. McD. Adair, secretary.

Norton—Planing Mill.—Roanoke parties are reported as to erect a planing mill in West Norton.

Richmond—Grist and Hominy Mill.—The Southern Manufacturing Co., previously reported as incorporated, is now erecting a hominy and grist mill with capacity of 300 barrels daily; mill to be operated by water-power. E. G. Leigh, Jr., is president, and C. R. Robins, secretary.

Riverton—Flour Mill.—The Riverton Mills Co., Limited, has, as reported last week, put new machinery in and improved its flour mill.

Roanoke—Carriage Factory.—The Bridge-water Carriage Co., previously reported as to erect a new carriage factory, has let contract for the stone work and foundations to L. H. Vaughan, and the contract for furnishing the lumber and furnishing materials to E. A. Forch, of Pittsburgh, Pa., and Love & Love, of Red Springs, N. C. The main building will be three stories high and 60x200 feet. Work on the buildings is to commence shortly.

Roanoke—Real Estate.—The Iron Belt Investment Co. has been organized with H. M. Darnall, president; J. R. Terry, vice-president, and L. S. Davis, secretary, for the purpose of dealing in real estate.

Stanley—Carriage and Wagon Factory.—C. E. Clinedinst has started carriage and wagon shops at Stanley, as reported last week.

Staunton—Shoe Factory.—The Staunton shoe factory is reported as to be reorganized and operated under a new management.

Suffolk—Lumber Mill.—W. P. Taylor, W. H. Gay and E. T. Gardner are reported as to establish a lumber manufacturing plant near Suffolk.

Suffolk—Electric-light Plant, &c.—W. H. Bradshaw, W. H. Jones, Jr., C. W. Jenkins and others have incorporated the Bradshaw Lumber Co. to establish electric-light plants, gas works, etc. The capital stock is \$50,000.

Wytheville—Overall and Shirt Factory.—The organization of a stock company to start an overall and shirt factory is now under way. M. M. Caldwell can give information.

WEST VIRGINIA.

Charleston—Telephone Line.—J. B. Williamson and others, of Logan C. H., have incorporated the Aracoma Telephone & Telegraph Co. to construct telephone lines, etc. The authorized capital stock is \$5,000; office at Aracoma.

Charleston—Real Estate.—D. A. Brawley and G. H. Holliday have organized the Charleston Real Estate Exchange to deal in real estate.

Harrisville—Gas Wells and Pipe Line.—The Keystone Oil Co. is reported as to construct a pipe line from its gas wells to Harrisville.

Huntington—Flour Mill.—It is stated that Stoddard Driggs has let contract to A. Wolf & Co. for the erection of a 100-barrel flour mill.

Martinsburg—Publishing.—F. V. Aler will start a paper to be called the World, as reported in our last issue.*

Moundsville—Cigar Factory.—J. C. Hendricks is reported as erecting a cigar factory.

Moundsville—Flour Mill.—The establishment of a roller process flour mill is talked of.

Moundsville—Buggy and Carriage Factory. N. Ganier, of Rogersville, Pa., previously mentioned, will erect a carriage and buggy factory in Moundsville, as contemplated.

Parkersburg—Lumber Mill.—J. A. Hutchinson, D. S. Vanmeter, D. D. Johnson and others have incorporated the Wood County Lumber Co. with a capital stock of not more than \$30,000.

Wheeling—Electric-light Plant.—The Wheeling Mining & Manufacturing Co. has received contract for the erection of a building for the city electric-light plant, lately reported, and the Van Dorn Co., of Cleveland, Ohio, contract for furnishing the structural iron work.

Mica and Asbestos Wanted.

Mr. F. C. Griffith, 541 Exchange Building, Boston, Mass., has clients who want mica and asbestos properties.

Building Notes.

Atlanta, Ga.—Station-house.—G. L. Norrman will prepare plans for the erection of the \$30,000 station-house lately mentioned.

Baltimore, Md.—Building permits have been granted to George Plitt to erect 8 two-story buildings; John H. Butler, 3 two-story brick buildings; D. S. Collett, 13 two-story dwellings; S. D. Price, 9 brick houses; Mary E. Dougherty, 3 two-story houses, and J. H. Butler, 3 two-story brick houses.

Baltimore, Md.—Warehouse.—Becker Bros. & Son contemplate building a four-story brick warehouse.

Baltimore, Md.—The Park Avenue Permanent Building & Loan Association has been incorporated by W. W. Watts, John Fishback, G. W. B. Bartlett and others. The capital stock is \$130,000.

Baltimore, Md.—Warehouse.—George Bunnecke & Son have secured contract for the erection of a six-story double warehouse for J. J. Thomson. It is to have hydraulic elevators, etc. J. C. Gott prepared the plans.

Beaumont, Texas.—Court-house.—Architect Heiner, of Houston, has prepared plans for the courthouse recently reported for Jefferson county. The estimated cost is about \$35,000.

Bridgeport, Ala.—It is stated that W. K. Peyton, of New York, will erect a brick block in Bridgeport.

Bristol, Tenn.—Hotel.—The Avoca Sulphur Springs Co., lately referred to, will build a hotel in 1892, and is now arranging for same.

Brunswick, Md.—The Enterprise Building Co., of New York, has, it is stated, been awarded contract for the erection of a number of buildings in Brunswick.

Brunswick, Md.—Depot.—Philip Walsh & Sons, of Baltimore, have contract for the erection of a depot in Brunswick for the Baltimore & Ohio Railroad Co. (office, Baltimore).

Cedartown, Ga.—Hotel.—The Fullwood Mineral Springs Co. has been organized and contemplates erecting a hotel on its property. J. I. Fullwood can give information.

Charleston, S. C.—Hotel.—It is stated that the E. Moore Hotel Co. has been organized by E. Moore, J. Pinkusohn and S. Pinkusohn. The capital stock is \$10,000.

Chattanooga, Tenn.—The building for the Working Girls' Home for the Woman's Christian Temperance Union, referred to in last issue, is to be a three-story structure, 46x70 feet, and have laundry, furnace etc. R. E. Smith prepared the plans.

Clanton, Ala.—Church.—The Baptists intend building an edifice. C. R. Bell can give information.

Clifton Forge, Va.—It is stated that A. J. Acord will erect 11 buildings, and Moody Carpenter & Co. are reported as to erect a three-story building.

Cumberland, Md.—A branch of the Baltimore Building & Loan Association of Baltimore has been organized in Cumberland with J. B. Humbird, president, and W. H. Williamson, secretary.

Cusseta, Ga.—Hotel.—Howard & Hicky are building the 18 room hotel referred to in last issue. R. H. Reynolds, of Richland, has the contract.

Elizabeth, N. C.—A branch of the Tidewater Perpetual Building & Loan Association of Norfolk, Va., has been organized with G. D. Pritchard, president, and G. D. Brothers, secretary.

Fort Worth, Texas.—Engine-house.—The city council has adopted the report of the fire committee recommending the erection of the central fire hall, recently reported, at a cost of \$30,000.

Frankfort, Ky.—A branch of the Iron Belt Building & Loan Association of Roanoke, Va., has been organized with C. Y. Wilson, president, and R. L. Green, secretary.

Grahams, S. C.—Warehouse.—S. G. Mayfield is building a tobacco warehouse.

Green Park, N. C.—Hotel.—The Green Park Improvement Co. will build a \$75,000 hotel on Green Park mountain. It is to have electric lights and all modern improvements.

Harriman, Tenn.—Bank Building.—The Harriman Bank & Trust Co. is erecting a two-story bank building 25x75 feet.

Harrison, Ark.—Hill, Fontaine & Co. will erect a brick building.

Havre de Grace, Md.—Depot.—The depot previously reported as to be built by the Philadelphia, Wilmington & Baltimore Railroad Co. (office, Philadelphia, Pa.) is to be two stories, 62x28 feet.

Hill City, Tenn.—School Building.—A school building to cost \$10,000 will probably be erected. The mayor can give information.

Hollins, Ala.—Hotel, etc.—Dunlop Medicine Co. is reported as erecting a hotel and hospital at Warm Springs.

Ivanhoe, Va.—School Building.—As stated in last issue, Pierce Bros. have contract for erecting a school building.

Jacksonville, Fla.—S. B. Hubbard has not determined as yet the rebuilding of his store building lately mentioned.

Knoxville, Tenn.—The Commercial Alliance Insurance Co. of Birmingham, Ala., has, it is stated, offered to erect a \$150,000 building in Knoxville for the Chamber of Commerce on certain conditions.

Loudon County, Va.—R. H. Dulaney has, it is stated, awarded contract for the erection of a three-story residence 90x65 feet to cost \$30,000.

Milledgeville, Ga.—Church.—Rev. A. B. Gibson will receive proposals until September 15 for the erection of an edifice for the African Methodist Episcopal Church.

Mobile, Ala.—Church.—The members of the St. Francis Methodist Episcopal Church propose building an edifice.

Monroe, La.—J. W. Wright has contract for building a cotton shed 384x91 feet for the Monroe Compress & Warehouse Co., lately mentioned. The cost is \$5,000.

Morganton, N. C.—Asylum.—A. G. Bauer, of Raleigh, has prepared plans for the erection of the \$25,000 building previously reported for the Deaf and Dumb Asylum. It is to be three stories and 248 feet long.

Morgantown, W. Va.—University.—E. M. Turner will receive proposals until September 23 for the erection of the building reported in last issue for the mechanical department of the University of West Virginia.

Navasota, Texas.—School Building.—J. A. Wilson has, it is stated, been awarded contract at \$16,000 for the erection of the school building lately reported.

New Birmingham, Texas.—The New Birmingham Building Co., lately referred to, will erect to or 15 cottages.

New Decatur, Ala.—College.—The location of a colored industrial college in New Decatur, at a cost of about \$100,000, is proposed. Dr. J. C. Hartzell, of Cincinnati, Ohio, can give information.

New Decatur, Ala.—J. D. Jervis contemplates erecting a \$6,000 residence.

New Orleans, La.—Asylum.—J. Bayle will receive proposals until September 15 for the erection of a building at the asylum of the French Benevolent & Mutual Aid Society.

Newport News, Va.—Courthouse.—The contract for building the courthouse lately mentioned, which was awarded to G. H. Evans, has, owing to some disagreement, been relet, and Wyatt & Faber, of Norfolk, secured same at \$18,795.

Norfolk, Va.—A stock company is being organized to purchase a site 50x105 feet and erect the five-story building for the Chamber of Commerce, Business Men's Association and Real Estate Exchange, previously mentioned.

Ocala, Fla.—J. F. Dunn contemplates, it is stated, erecting a \$100,000 building to be known as the Ocala Rifles' Block.

Roanoke, Va.—Orphanage.—It is stated that buildings to cost from \$75,000 to \$100,000 will be erected for the Catholic orphanage reported in last issue.

Rosedale, Miss.—A. B. McConnell has furnished plans for the building of a residence for Fontaine Jones.

Salem, Va.—The Salem Building & Loan Co. is to be organized with A. M. Bowman, president; T. J. Shickel, treasurer, and R. H. Brown, secretary.

Scottsboro, Ala.—Hall.—The Knights of Pythias have, it is stated, let the contract for the erection of a \$6,000 hall building.

Searcy, Ark.—School Building.—Ross & Sowell have secured contract at \$5,500 for the erection of the school building lately mentioned. It is to be three stories, 60½x67 feet.

Sparta, Ga.—School Buildings.—The erection of two school buildings is contemplated. The mayor can give information.

Stanley Creek, N. C.—Church.—The Methodists are erecting an edifice.

St. Augustine, Fla.—Hotel.—Thomas Tugby will probably build a four-story hotel on the site of the old Tremont Hotel.

Statesville, N. C.—Church.—M. C. Williams will receive designs and specifications for an edifice to be built by the Dissenters.

Stephenville, Texas.—Courthouse.—S. A. Tomlinson, of Fort Worth, has secured contract at \$59,173 for the erection of the courthouse, lately reported, for Erath county. Gordon & Laub, of San Antonio, prepared the plans.

Tampa, Fla.—Edenfield & Jetton have contract for the erection of a two-story business house.

Towson, Md.—Church.—The members of the Calvary Baptist Church contemplate building an edifice. Rev. Mr. Hubbard can give information.

Towson, Md.—Hotel.—The enlargement of the Hotel Hampton is probable. J. B. Brown can give information.

Tyler, Texas.—The St. Louis & Southwestern Railroad Co. (office, St. Louis, Mo.) has let con-

tract for the erection of another wing and a third story to its brick office building in Tyler.

Umatilla, Fla.—The Umatilla Building & Loan Association has been organized with W. C. Chapman, president, and F. B. Hannah, secretary. The capital stock is \$50,000.

Washington, D. C.—J. G. Meyers is preparing plans for the erection of a three-story residence 67x110 feet to cost \$75,000; it is to have electric lights, bells, etc.

Washington, D. C.—John Farmworth will erect a three-story brick dwelling 20x36 feet to cost \$5,000; Patrick O'Farrell, a two-story dwelling to cost \$18,000, and H. C. Nevins, a four-story residence 43x54 feet to cost \$40,000.

Way Cross, Ga.—Courthouse.—The plans of G. L. Norrman, of Atlanta, have been adopted for the erection of the \$20,000 courthouse previously reported.

Waynesville, N. C.—School Buildings.—J. M. Davis reports that a \$7,000 or \$8,000 school building will be erected, and that the Women's Christian Temperance Union will erect three school buildings for the South in Waynesboro this winter.

Waynesboro, N. C.—Hotel.—The erection of a hotel is a probability of the near future. J. M. Davis can give information when definitely arranged for.

Winston, N. C.—H. E. Fries has contracted with Fogle Bros. for the erection of 5 four-story buildings to be 63x100 feet.

BURNED.

Bandera, Texas.—The cotton gin of E. Huftmeyer.

Bigfoot, Texas.—The cotton gin of Hamilton Bros.; loss \$6,000.

Buchanan, Va.—The Franklin Brass Works; estimated loss \$100,000.

Chappel Hill, Texas.—The cotton gin of Rufus Felder, near Chappel Hill.

Charleston, W. Va.—The planing mill of John Morgan & Co.; loss \$15,000.

Davis, W. Va.—The box factory of the Blackwater Lumber Co.

Eldorado, Ark.—The lumber mill of O'Hear & Love; loss \$5,000.

Hempstead, Texas.—The grist mill and cotton gin of B. Shindler; loss about \$7,000.

Laytonville, Md.—The flour mill of J. S. Benson & Son; loss about \$5,000.

Lexington, Va.—The fruit evaporator and cider mill of W. T. Wombledorf in Rockbridge county.

Louisville, Ky.—The tobacco rebanding establishment of J. J. Bethel; loss about \$8,000.

Lumpkin, Ga.—The cotton gin of L. F. Humber in Stewart county.

Sulphur Springs, Texas.—The furniture factory of Weaver & Wilson; loss about \$8,000.

Wartrace, Tenn.—The flour mill of A. S. Reeves; loss about \$8,000.

Norfolk's Bright Prospects.

NORFOLK, VA., September 5, 1891.

Editor Manufacturers' Record:

The total receipts of cotton at Norfolk for the year ending August 31, 1891, were 660,627 bales, against 412,741 bales for the preceding year. Interviews and letters from the leading cotton dealers, bankers and merchants develop the fact that arrangements are being made to handle even more cotton during the coming year, in spite of the damage which that crop has recently suffered. The increased railroad facilities secured by the extension into the cotton belt by the several big systems justify the anticipation of larger receipts. The outlook in banking and financial circles is reported as most gratifying, and a season of unusual activity and prosperity is looked for by merchants in all lines.

The Norfolk & Western's floating elevator Metropolitan has arrived. Its tower is 43 feet high, it has 23 feet of beam, and is 70 feet long. It receives, weighs, cleans and delivers the grain all at once, and promises to greatly facilitate the handling of the Norfolk & Western's business.

The common council has appointed a special committee to investigate the needs of the fire department, and it looks as though there would soon be a most effective department in this city. The citizens and organizations of Portsmouth and Norfolk are active in their efforts to make the October jubilee a grand success. An enthusiastic meeting was held Monday night and several committees appointed,

Beet vs. Cane Sugar.

BY JACOB REESE.

"The fittest will survive" is true in processes of manufacture as well as in animal life, and from the last year's report we find that the great battle that has been going on for some years between the sugar beet and the sugar cane, and their relative processes of manufacture, has finally been won by the sugar beet.

The entire production of sugar in the world in 1890 was as follows:

CANE SUGAR.	Tons.
Cuba.....	600,000
Porto Rico.....	70,000
Trinidad.....	50,000
Barbadoes.....	60,000
Jamaica.....	30,000
Antigua and St. Kitts.....	25,000
Martinique.....	40,000
Guadeloupe.....	50,000
Demerara.....	125,000
Reunion.....	30,000
Mauritius.....	125,000
Java.....	310,000
British India.....	60,000
Brazil.....	150,000
Manila, Cebu and Iloilo.....	180,000
Louisiana.....	125,000
Peru.....	30,000
Egypt.....	35,000
Sandwich Islands.....	120,000

Total tons cane sugar.....2,228,000

BEET SUGAR.	Tons.
Germany.....	260,000
Austria.....	750,000
France.....	775,000
Russia.....	475,000
Belgium.....	200,000
Holland.....	60,000
Other countries.....	80,000

Total tons beet sugar.....3,600,000
Total tons cane and beet sugar.....5,828,000

From the foregoing table it will be seen that there was 1,372,000 tons more sugar made from beets in 1890 than from cane. It is also interesting to note that the beet sugar is made in different localities from those where the cane sugar is made. We thus find that it is a meteorological battle of zones as well as of processes. It appears that a mean summer temperature of 70° Fah. for 90 days is most suitable for the production of the sugar beet; so, while the most favorable points for its cultivation will be in New York, Pennsylvania, Ohio, Michigan, Northern Indiana and Illinois, Wisconsin, Southern Minnesota and Dakota, Nebraska, Colorado, New Mexico, Arizona, Utah, Idaho, Nevada, Washington and California, still there are many points in the South that will prove favorable to the production of the sugar beets.

The amount of sugar imported into the United States during the year ending July 1st, 1890, was 1,934,011.560 pounds, and the value of same was said to be \$96,094,532; but the people had to pay much more than that amount for it. It will thus be seen that we are paying more than \$100,000,000 per annum for imported sugar which can be produced to a profit in this country.

The United States government is now paying a bounty of two cents per pound on all sugar produced in this country of a certain standard, and this has prompted several parties to enter upon its production. The applications for the sugar bounty entered up to August 1, 1891, are as follows:

	Estimated production.
	Pounds.
Sugar cane, 733 producers.....	548,257,200
Sugar beet, 8 producers.....	29,210,000
Sugar sorghum, 6 producers.....	2,510,000
Sugar maple, 3,740 producers.....	8,000,000
Total.....	587,977,200

It is estimated that the production of beet sugar will exceed 35,000 pounds, and that the bounty to be paid by the government on all kinds in 1891 will not vary very much from \$10,000,000.

As an evidence of what has been done in France, it is reported that in 1881 and 1882 the yield of sugar from beets per acre was 1,532 pounds; in 1885 and 1886 it had risen to 2,040 pounds of sugar per acre, and in 1890 the yield of sugar per acre from beets was 3,172 pounds. With an average yield of 3,172 pounds of sugar per acre the bounty of two cents per pound would amount to \$63.44 per acre.

In 1881 it required nearly eighteen tons of beets to produce one ton of sugar, but

by improving the plants and fertilizing with the best phosphates, in 1890 nine tons of beets produced one ton of sugar. So that it is very important to use the best fertilizers and to secure the best seed.

The process of extracting the sugar from beets appears to be more perfect than the process for extracting the sugar from cane, for the amount of sugar in beets is 12.40, and 9.83 is extracted, it being 79.36 per cent., while the sugar in the cane is 12.36, and only 8.06 is extracted, which is only 65.20 per cent. Thus we find that 79.36 per cent. of the sugar in beets is extracted, while only 65.20 per cent. of the sugar in the cane is extracted. It appears that there is too much of the sugar from cane goes into molasses.

Among the beet sugar factories that have been put in operation this year, the Chino Valley Beet Sugar Factory is probably the best. Their factory started on September 1st, and the first year's run will be looked for with great interest.

In California, first-class beets rarely sell at less than \$5.25 per ton, and now that the government is paying a bounty of \$40 per ton on the sugar, which is equal to \$4 per ton on the beets, the farmer will certainly get a higher price for his beets. But at \$5.25 per ton, if he can raise an average of 10 tons to the acre, he will get \$52.50 per acre, so that the culture of sugar beets is now the most profitable crop the farmer can raise.

A sugar school has been established at Audubon Park, in Louisiana, with a full corps of professors who are expert in the theory and practice of the manufacture of sugar from cane, and already it is said their scholarship list is full.

The cane sugar crop of Louisiana is estimated this year to be fully 220,000 tons; the bounty will be about \$9,800,000, so that it is very important that the most improved methods of extracting the sugar be employed, and that the managers, chemists and experts who have charge of the sugar factories shall be thoroughly trained in the business. For these reasons I consider the establishing of the sugar school as a most important enterprise, and I predict that the establishing of a first-class sugar school in the Northwest will not only prove profitable to the projectors, but will be of inestimable value to the beet sugar industry as well as to the nation at large, for the day is not far distant when the United States will not only produce all her own sugar, but will export beet sugar in large quantities.

Philadelphia, Pa., Sept. 3, 1891.

A Novel Banking Enterprise.

The Farmers' Banking Co. has been organized at Griffin, Ga., under a charter granted by the general assembly in October, 1889. It has more than 600 stockholders, whose aggregated wealth is estimated to amount to upwards of \$2,000,000. It is expected that it will be open for business the first of October.

This bank will inaugurate a novel plan devised by the Farmers' Alliance, although it will be operated in all respects like other banking institutions. The subscribers to its stock turn in bales of cotton instead of cash. Colonel Searcey, the president, has been to New York and arranged for the sale of all the cotton subscribed.

None but good middling cotton will be accepted from subscribers, consequently the purchaser is sure of getting a uniform grade. This will be advantageous to him and to the farmers. Some years ago Mr. Edward Atkinson suggested that if a plan were adopted by which every bale could be traced back to the original owner, it would insure more care in keeping it clean, and would prevent weighting it with sand and other foreign materials. This bank will, to the extent of the cotton it handles, be acting on the line of his suggestion.

The International Congress of Geologists.

The Fifth International Congress of Geologists, held at Washington, D. C., the last week of August, was attended by many of the foremost geologists of the world. Austria and Belgium had each 3 representatives, Canada 2, Chili 1, France 5, Germany 23, Great Britain 14, Mexico 3, Norway and Peru 1 each, Roumania 4, Russia 9, Sweden 4, Switzerland 2 and the United States 172. Among the latter were the following representatives from the South: Prof. John C. Branner, State geologist of Arkansas; Prof. H. D. Campbell, Washington and Lee University, Lexington, Va.; E. T. Dumble, State geologist of Texas; Robert T. Hill, Department of Agriculture, Texas; Prof. J. A. Holmes, State geologist of North Carolina; John H. Means and R. A. F. Penrose, Jr., of the geological survey of Arkansas; Prof. J. M. Safford, Vanderbilt University, Nashville, Tenn.; Eugene Allen Smith, State geologist of Alabama; J. W. Spencer, State geologist of Georgia; Wm. H. Von Streeruwitz, assistant of Texas geological survey; E. O. Ulrich, Newport, Ky.; Prof. J. C. White, University of West Virginia; Professor James Woodrow, president and professor of geology, University of South Carolina. Two other eminent men of Southern birth were Professor E. W. Hilgard, formerly State geologist of Mississippi, and now of the University of California, and Professor Joseph Le Conte, now of the above university, but formerly professor of geology in the University of South Carolina.

A representative of the MANUFACTURERS' RECORD asked Professor Holmes, State geologist of North Carolina, what might be considered the chief topic of discussion at this congress, and what effect, if any, it would have upon the continued development of the South's minerals and ores. In reply, professor Holmes said:

"The principal subjects brought before the geological congress for discussion were: "1. The correlation of different geological formations or grouping together rocks of the same age.

"2. The methods of making and coloring geological maps so as to have them uniform and easily understood in different countries.

"The objects arrived at by the congress are primarily of general scientific interest, but these are of great importance in relation to economic problems.

"1. They would enable geologists to locate in age rocks likely to bear minerals of value in different regions.

"2. They would enable all intelligent persons to know something of the character of the rock formation of their own lands."

Here a bystander interrupted, saying: "I was journeying through your mountain regions some years ago, professor, and there met with many incidents showing the importance of the educational work you have just mentioned. On one occasion two of us, riding in a buggy, came to a narrow creek with a swift current, evidently much swollen by the rain. Afraid to venture, we went back to the nearest house, whose owner said he would mount and ride across, showing us the ford. On the way he suddenly halted, and, with much earnestness, asked if either of us knew anything about rocks. He said: 'Men come round here all the while hunting with little hammers, and carry off pieces of rocks, and some try to buy my farm. If I could only tell what there was that made them want it, I should know what to do.' This was but one of many similar incidents that show how needful it is that intelligent but uninformed citizens of the mineral districts of the South should have some such guide as this congress is trying to secure."

"That is it exactly," said Professor Holmes. "We do not expect to make every man a geologist, but we hope to relieve just such perplexities as those you have mentioned, and enable owners of mineral lands to know something about them."

Returning again to the work of the congress, Professor Holmes said:

"Foreign geologists in attendance on the congress have been greatly impressed with the richness and vastness of the American geological formations. They will carry away with them many reports, and a large amount of information, and a greatly increased interest in our mineral wealth. As illustrative of this wealth in a single State, each foreign member of the congress has been presented with a copy of a report just published by the United States Geological Survey on the mineral resources of North Carolina.

"As looking to the extension of geologic work in this country, an organization of State geologists has been formed, which has for its object the establishment of geological surveys in many States that have none at present.

"In conclusion I may say that this congress has brought together more notable geologists from other countries than have before met in the United States, and that the acquaintances formed with them and with each other by American geologists will be of inestimable benefit to this country, in which the South will fully share."

The publication referred to by Professor Holmes is Bulletin No. 74 of the United States Geological Survey, on the minerals of North Carolina, by Professor Frederick A. Genth. Copies can be obtained by addressing Major J. W. Powell, director United States Geological Survey, and enclosing fifteen cents. Under the Act of Congress a price is charged for all publications from this bureau of the government. Postage stamps will not be received, the law requiring that the money paid for any publication must be by postal note, money order or in currency for the exact amount.

Buena Vista (Va.) Notes.

BUENA VISTA, VA., September 5, 1891.
Editor Manufacturers' Record:

The opening of the glass works has proved such a matter of general interest that large crowds have visited them constantly since the opening day, both citizens and strangers. Four months ago the buildings were commenced. They extend over nearly an acre of ground. Promptly on the day at which it was announced some time ago that the works would be equipped for turning out their product, orders have commenced to be filled. The works will require about 80 hands to run them, of which a large number are experts. There are 30 or 40 glassblowers now at the works. Fruit jars were the first results of operation, and then will follow a run of mineral-water bottles.

All of the industries originally planned and provided for at Buena Vista are now in active operation with the single exception of the steel plant. This satisfactory state of affairs is due to the wise and persistent policy of our parent company and its efficient management.

The production of pig iron by the Buena Vista Iron Co. has been going higher each week, and reached 762 tons for the week ended August 29, averaging 109 tons every 24 hours. With the Rarig and other works in full operation, there ought soon to be a home market for our iron.

The fire-brick works have already filled orders for over 100,000 of their product.

L. C. CHASE, manager of the Cumberland Gap (Tenn.) Building & Loan Association, wants \$100,000 to build 200 houses. Security, first mortgage 10 per cent. guaranteed, payable semi-annually. He also desires to borrow money on improved property, 10 per cent. guaranteed by first mortgage. He will furnish further information upon application.

Towns in Western Carolina.

[From Wilmington (N. C.) Star.]

It is very agreeable to us to see that some of the towns in North Carolina are being so well advertised abroad and in great journals in other States. North Carolina is indeed wonderfully rich in her deposits and advantages, but hitherto they have been very imperfectly made known. A brighter day began to dawn some ten or twelve years ago, and now there are sections of the State that are well known to hundreds of thousands of people in the North, and even the Britishers are beginning to learn something of our enchanting land.

Winston is being well written up, and Rutherfordton, Wilkesboro and other sections are receiving attention at the hands of writers who know how to present facts and array figures and bring out attractions. The western portion of the State is destined for great things. In another place it is mentioned by the MANUFACTURERS' RECORD that an eminent physician said to its editor that Western North Carolina would become the sanitarium of the world.

Only the other day one of the most distinguished of our own physicians, who had recently been to that marvelous section, told us that the scenery around Shelby, in Cleveland county, was of incomparable beauty, far exceeding anything else he saw. Many wealthy South Carolinians have built lordly and elegant residences in that section.

There is a long article that would fill several columns of the Messenger in the Baltimore MANUFACTURERS' RECORD of the 25th July. It is all about North Wilkesboro. We are gratified to see such articles. It promises well for the State. North Wilkesboro is a newly incorporated town. It is surrounded by mountains filled with minerals. The new town is in the midst of enchantments. The writer in the MANUFACTURERS' RECORD says "it lies mainly on a table land overlooking the fertile valleys of the Yadkin and Reddies, and surrounded by some of the most charming mountain scenery for which Western North Carolina is becoming world famous."

The prospects are promising. Methodists, Presbyterians and Baptists will soon erect church edifices. A \$50,000 bank has been organized and a fine building is to be erected. A tobacco warehouse will be built. Already a spacious hotel has been erected. The correspondent says:

"On an elevated, tree-covered knoll, 110 feet higher than the railroad, is a tract of ten acres called Kensington Heights, upon which it is proposed to some day erect a handsome hotel on the plan of the Battery Park at Asheville, and in many respects the opportunities exist for making it as popular a resort as Asheville's famous hotel. From it may be seen Old Grandfather mountain on the west, Brushy mountains on the south, Pilot, Sauratown and the Cascade mountains on the east, while sweeping around from the west and ranging to the north as far as the eye can reach are the hazy peaks and domes of the beautiful Blue Ridge."

Residences and stores have been built, and various industries will soon be pushed to completion. The town is not to be old foggyish. It will have electric lights, good sidewalks, macadamized streets and perfect sewage. Stench to poison pure air to be got rid of—not, indeed, to be allowed to come forth. Here is an example for the older and larger towns.

Salubrity of climate, fertility of soil, beauty of situation, railroad facilities and rich mineral deposits are so many inducements. The water-power of that section is simply inexhaustible and wonderful. The correspondent says: "So there are within the confines of Wilkes county 323 miles of water courses, and every one of

the streams above enumerated affords a greater or less amount of available water-power." It is rich also in timber, is a fine fruit section, and apples, grapes, cherries and peaches grow to great perfection. But we may not pursue the theme. Western North Carolina is the attractive spot of all Southland. Its wonders, when better known, will attract settlers by the hundred thousands.

Cotton Crop Movement for 1890-91.

According to the report of the New Orleans Cotton Exchange, the cotton crop of the United States for the year ending at the close of August, 1891, was 8,652,579 bales, the largest crop ever grown by 1,341,275 bales.

In reference to receipts at the American ports the report says that, with the enormous crop, movements in every direction have been correspondingly heavy. New Orleans has handled more cotton than in any year but one of her history, her net receipts exceeding 2,000,000 for the first time since the war, and reaching within 60,000 of those in 1860, the largest of *ante bellum* years.

Galveston has passed the million mark for the first time, and Savannah has handled considerably more than a million bales, exceeding all previous records. The gross overland movement for the year, after deducting interchanges between the different points of crossing and reshipping into the cotton belt, has reached 1,538,260 bales, exceeding last year by 184,970 bales, and the year before by 181,689 bales.

The heaviest gains in the overland have been at St. Louis and points above on the Mississippi river, which show an excess of 237,000 bales. Railroads out of Louisville are 95,000 bales ahead of last year, while Cairo, exclusive of through cottons for St. Louis, is short nearly 42,000 bales. Cincinnati and Virginia points also show a falling off of 132,000 bales.

The statement makes the foreign exports for the year to Great Britain 3,329,432 bales, to France 559,099 bales, to the continent and channel ports 1,890,291 bales, a total exclusive of Canada of 5,778,822 bales. The excess in foreign ports over last year is 878,382 bales, of which Great Britain has taken 479,330 bales, France 86,362 bales, and the continent 312,690 bales.

The report mentions shipments of American cotton from New York to Japan of 4,494 bales.

The total takings for American consumption during the year were 2,632,023 bales, against 2,346,152. These embrace 2,027,362 by Northern spinners, against 1,799,258 last year—a gain of 228,104; and 604,661 by Southern spinners, against 546,894 last year—a gain of 57,767.

The secretary has made a complete census of the Southern mills. These show that South Carolina has become the largest consumer of cotton among the States of the South, Georgia, which ranked first last year, coming next.

CONSUMPTION BY STATES.

The consumption by States for this and last year is given as follows:

	1891.	1890.
Alabama.....	39,143	35,772
Arkansas.....	540	453
Georgia.....	153,818	146,385
Kentucky.....	14,536	13,509
Louisiana.....	13,660	14,066
Mississippi.....	15,162	16,069
Missouri.....	1,538	1,644
North Carolina.....	140,508	119,595
South Carolina.....	164,957	144,955
Tennessee.....	30,508	34,508
Texas.....	6,522	3,614
Virginia.....	23,797	17,224

The report refers to the excess in Southern cotton consumption as a handsome showing when considered in addition to the marked increase in 1889-90, and calls attention to the fact that several States now consume more cotton per annum than was consumed by the entire South but little more than ten years ago.

It also shows the total number of mills in the 13 cotton States as 340, including 287 in active operation, a gain of 11 compared with September, 1890. The total number of spindles in operation is 7,823,710, a gain for the year of 158,150, and 50,404 new spindles are reported in course of erection.

Front Royal (Va.) Notes.

FRONT ROYAL, VA., Sept. 5, 1891.

Editor *Manufacturers' Record*:

The population of Front Royal, including those residing within a belt extending one-half mile beyond the corporate limits, is over 1,800 people. The number of dwellings, stores and shops in the same limit is about 370, with over 20 buildings in course of erection.

Of the many plants at work here the latest addition to our industries is the plant of the Maryland Tack Co. This is a busy place with a total capacity of about 24 tons of tacks and wire nails per week. This company begins work with 23 men, and will increase its force to 45 or 50. The portion of the main building fronting on Commerce avenue is 65x65 feet and two stories. The machinery-room is 135x35 feet. The rest of the plant comprises engine, boiler, sealing and iron rooms. It begins operations with a trade already fixed and a demand for its goods, and will be a certain factor among our industries.

Work on the furniture factory is being pushed along. Before winter sets in it will be in operation.

The main building and engine-room of the G. W. Shank Manufacturing Co. are fast assuming shape. The machinery will probably go in within a few weeks.

A. C. Corron has had his old building torn down, and will erect a handsome three-story brick warehouse on the same site.

J. BUCKNALL SMITH, C. E., author of "Cable Traction as Applied to the Working of Rail and Tramways," "Rope Haulage in Mines," "The Diamond Mining Industry in South Africa," etc., has written a treatise upon wire, its manufacture and uses, embracing comprehensive descriptions of the constructions and applications of wire ropes. The work is intensely interesting just at this time, covering a great number of points of the utmost importance to electricians. It is intended to convey to the average reader intelligible and practical descriptions of the history, manufacture and uses of various kinds of wire as occurring in or applicable to innumerable industries and purposes of daily service to all classes of the community. This is probably the only treatise on these subjects published, and its value can be appreciated almost at a glance. It is published from the offices of "Engineering," London, and John Wiley & Sons, New York.

A NEW DRY-KILN.—W. A. Leary, of Norfolk, Va., Southern agent of the American Drier Co., of New York, is very much elated over the remarkable success of a dry-kiln which he has recently erected for the West Norfolk Lumber Co. The new kiln is 85 feet long and 17 feet wide, to dry 12,000 feet of 1-inch sap pine green from the saw daily. That the kiln did all and more than was claimed for it is attested by a flattering letter received from the West Norfolk Lumber Co., which gives the following as the result of the first trial: "The first car contained 6,000 feet of 2-inch by 10-inch 16-foot lumber; the second car contained 4,500 feet of 2-inch by 10-inch 16-foot lumber, which was thoroughly dry after being left in the kiln five days; the third car, 4,000 feet of 1-inch 16-foot lumber, was bone dry after being in the kiln 72 hours." They also state that the lumber was bright and handsome, and that there was not the slightest check in a single board. It is believed that it is impossible to stain or mould lumber in these kilns, as the circulation is perfect. The apparatus is simple and requires no care, there being no machinery to get out of order. With the success of this system, as shown by the foregoing high testimonial, Mr. Leary thinks he has marked a new era in this line. He has accomplished his desire to perfect a kiln on a new principle which does away with engine fans and other like machines, and substitute a perfect natural draft system which is at once automatic, simple and effective.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Barrel Machinery.—R. G. Ward, Charleston, S. C., desires to correspond with manufacturers of machinery for making lime and cement barrels.

Belting.—W. P. Oldham & Co., Wilmington, N. C., want prices on link belting for elevators.

Belting.—M. T. Kibby, 615 Hazel street, Lansing, Mich., will want belting.

Belting.—Morton Bros., Kensington, Ga., will want belting.

Boiler and Engine.—M. T. Kibby, 615 Hazel street, Lansing, Mich., will want boiler and engine from 10 to 20 horse-power.

Boiler and Engine.—Morton Bros., Kensington, Ga., will want an engine and boiler.

Bolter.—A. G. DeLoach, Sycamore, Ga., wants prices on an automatic bolter.

Bolting Cloth, etc.—C. A. Bains Grady, Texas, wants bolting cloth and chest for flour mill.

Brick Machinery.—R. G. Ward, Charleston, S. C., desires to correspond with manufacturers of brick machinery.

Broom Machinery.—J. A. Montgomery, Fayetteville, Ark., may want improved broom machinery.

Broom Machinery.—H. A. Schaeffer, Jackson, Tenn., may need a broom scraper, winder and press.

Cleaning Machinery.—C. C. Brown, Tilton, Ga., will purchase cleaning machinery for grist and saw mill.

Conveyor.—L. A. Davis & Bros., Inglehome, Fla., want a slab chain or conveyor.

Dredging Machinery.—The Louisiana Construction & Improvement Co., New Orleans, La., wants information in regard to dredging machinery.

Drills.—W. E. Horne, of Atlanta, Ga., will want electric drills.

Electric Motor.—W. E. Horne, of Atlanta, Ga., will want an electric motor.

Electric-light Plant.—Harry C. Sloan, Lock Box 44, Lakeland, Fla., wants prices f. o. b. Lakeland on a 500 16 candle-power alternating current dynamo and all switch-board appliances, 200 16 candle-power lamps, 5 and 10-light converters, 4½ miles No. 8 & S. gauge line wire, and 20 arc lamps of 2,000 candle-power each, to be run on this alternating current line.

Electric light Plant.—W. H. Norris, Stanley Creek, N. C., desires to correspond with parties for an electric-light plant.

Elevators.—C. C. Brown, Tilton, Ga., will purchase elevators for saw and grist mill.

Elevators.—W. J. Edbrooke will receive proposals at the Treasury Department, Washington, D. C., until September 21, for furnishing and erecting one electric passenger and freight elevator in United States custom-house building at Wheeling, W. Va. Plans and specifications can be had on application.

Engine.—Cooper & Spottwood, Petersburg, Va., want a good second-hand 20 or 25 horse power engine.

Engine.—N. E. Turner, president, Thomasville, Ga., wants prices on engine.

Engine, etc.—The Lawrenceburg Land & Mineral Co., Lawrenceburg, Tenn., desires to purchase an engine of from 100 to 200 horse-power and about 300 to 400 feet of line shafting, making payment in selected real estate.

Gang Edger.—J. W. Dowling, Lake Ogden, Fla., may want a gang edger.

Heating and Ventilating Apparatus.—W. J. Edbrooke, supervising architect, Washington, D. C., will receive sealed proposals until October 6 for all the labor and materials required and fixing in place complete the low-pressure return circulation steam heating and ventilating apparatus, power boiler, pump, etc., in the United States courthouse, etc., building at Galveston, Texas. Specifications, drawings and full information on application. (See proposals.)

Hoisting Engine, Boiler, etc.—P. C. Hains, Washington, D. C., will receive sealed proposals until September 21 in triplicate for furnishing and delivering at Fort Washington, Md., the following plant: One 50 horse-power hoisting engine, one 60 horse-power stationary locomotive boiler, steel wire hoisting rope and sheaves for same, dump cars, dumping coal tubs and water tank. Separate proposals for each class of materials.

Hoisting Engine.—Dr. V. M. Metcalfe, Ocala, Fla., needs a hoisting engine.

Hoisting Plant.—W. J. Thompson, Dardanelle, Ark., will probably want to purchase a hoisting plant for hauling cars up a 3,400-foot incline, with an elevation of from 20 to 45 degrees.

Lathe.—Morton Bros., Kensington, Ga., will want turning lathe.

Lath Machine.—A. Lush, Chesterfield, Va., wants prices on a lath machine.

Lath Mill.—A. G. DeLoach, Sycamore, Ga., wants prices on a lath mill.

Lime-kilns.—R. G. Ward, Charleston, S. C., desires to correspond with manufacturers of machinery for making lime from rock, also builders of kilns for same.

Mill Stones.—W. P. Oldham & Co., Wilmington, N. C., want prices on mill stones suitable for rice.

Mining Machinery.—The Tennessee-Florida Land Co., Chattanooga, Tenn., will most likely want to purchase a complete outfit for mining phosphate.

Piping.—The secretary of the water board, Atlanta, Ga., is receiving bids for furnishing six miles of water pipe. The proposals will be received until September 16 and call for the following cast-iron pipe and specials: 600 feet 48 inch pipe and four ¾ bends; 28,000 feet 30-inch pipe, crosses, tees, etc.; 75,000 feet 20-inch pipe, crosses, tees, etc. The quantities given are approximate and may be increased or diminished.

Planer.—M. T. Kibby, 615 Hazel street, Lansing, Mich., will want pony planer.

Planer, etc.—G. E. Wilcox, Corbin, Ky., will probably want a planer and matcher.

Pounders.—W. P. Oldham & Co., Wilmington, N. C., want prices on McKinley pounders or mortars for rice mill.

Publishing.—F. V. Aler, Martinsburg, W. Va., wants material for publishing house.

Pulleys, &c.—M. T. Kibby, 615 Hazel street, Lansing, Mich., will want pulleys, shafting, etc.

Pumps.—The Louisiana Construction & Improvement Co., New Orleans, La., wants information in regard to sand pumps.

Pumps.—R. W. Earnhart, Batesville, Ark., needs pumps.

Rails.—G. L. King, St. Petersburg, Fla., will want from 3 to 5 miles of light second hand rails.

Rails.—The Carolina Mining, Manufacturing & Improvement Co., Sylva, N. C., will want iron rails.

Rails.—James Collins, Stephenville, Texas, wants prices on rails for street railway.

Rolling Stock.—The Carolina Mining, Manufacturing & Improvement Co., Sylva, N. C., will want rolling stock for its railroad.

Roofing.—W. H. Riley, care Berlin Iron Bridge Co., East Berlin, Conn., is in the market for best discount on roofing.

Saws.—M. T. Kibby, 615 Hazel street, Lansing, Mich., will want rip saws and cut-off saws.

Saws.—Morton Bros., Kensington, Ga., will want band saw and jig saw.

Screens.—Bryan Tyson, Prosperity, N. C., wants battery screens for a gold mining plant, slotted about No. 8 or 30 meshes to the linear inch.

Shafting.—W. P. Oldham & Co., Wilmington, N. C., want prices on shafting.

Stave Machine.—L. A. Davis & Fros, Inglehome, Fla., want a stave machine for making rosin barrels.

Steam Plant.—Harry C. Sloan, Lock Box 44, Lakeland, Fla., wants prices on a 50 horse-power steam plant complete, steel return tubular boiler, duplex steam feed pump, heater, and all connections.

Telephone Line.—D. W. Alderman & Co., Alcolu, S. C., want propositions from parties to construct a telephone line with two long distance telephones. The line is to be 10 miles long.

Tram Cars.—G. E. Wilcox, Corbin, Ky., will want some tram cars.

Water Works.—The city of Shelbyville, Ky., desires a company to construct water works. Address G. A. Armstrong, Jr.

W. H. RILEY, care of Berlin Iron Bridge Co., East Berlin, Conn., is in the market for best discount on paint.

M. M. CALDWELL, Wytheville, Va., desires to correspond with manufacturers of cloth, outing, etc., for shirts.

THE Buckeystown (Md.) Plow Works desires to correspond with manufacturers of plow beams and handles. Address E. L. Keller.

THE Alabama City Furniture Co., Gadsden, Ala., wants to correspond with manufacturers of marble slabs and mirrors for bureaus, washstands and sideboards.

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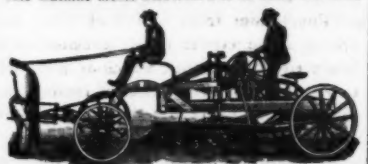
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Double Reciprocating Piston Engine.

The Duke double reciprocating piston engine, made by the Duke Engine Manufacturing Co., Grand Haven, Mich., has now been in use for four years, during which time it has fully demonstrated its superior qualities. The illustrations shown herewith represent the engine and its working parts complete, and give a clear idea of its plan of construction and principle of operation.

The Duke is not a rotary, but a regular cut-off double reciprocating engine, and

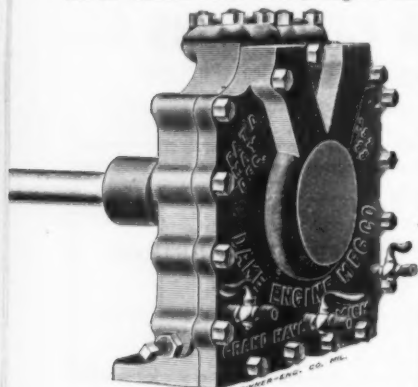


FIG. 1.—FOR FANS, BLOWERS, CENTRIFUGAL PUMPS, ETC.

occupies much less space than engines of the rotary type of less power. Their form enables them to be applied to any machinery at a small cost, and their durability reduces the expense for repairs to a minimum. They are self-contained, and the simple manner of applying the engine to machinery by adapting the engine shaft to such machinery by coupling or directly through the machine attached to by bolting down and the manner of applying the steam by channels cast on the cover are shown in Fig. 1.

Being self-contained in every way they do not require expensive foundations, and in many cases are set on floors in upper stories of high buildings. Besides the economy effected in the matter of space in the use of steam, they are also savers, the parts being formed to cut off the steam at five-eighths of the stroke and run three-eighths on expansion.

Figures 2 and 3 show the working parts of the engine. In Fig. 2 the pistons are removed, showing the interior of the case with crank in place. The crank revolves in the chamber behind the back of the interior of the case. This is supplied with oil and water from an opening on the back of the case just above the chamber, giving perfect lubrication to every part of the interior of the engine.

Fig. 3 shows the pistons in the proper

The manner of applying the steam is by channels cast on the cover, which are shown in Fig. 1. These lead down to the center of the cover, one opening into a central aperture, and the other into an annular opening on the inside of the cover, as shown in Figs. 2 and 3. Four channels are cored through the inner piston, two leading to the top and bottom and one to each end of the inner piston, the latter also leading through the ends of the outer piston. Four ports corresponding with the channels in the interior of the inner piston are cut through the face (or side next to the cover) of the inner piston in the proper position to register over the central aperture in the cover, the steam entering the port in the inner piston through the central aperture of cover, and resisting against the side of the case, imparts motion to the crank, the port passing over the annular ring and exhausting into it after having done its work. There are four distinct impulses of steam to each revolution of the crank, and the arrangement of the ports to the crank is such that each impulse of steam is given at a point where it has the greatest power. The expansion of steam is secured in the passage of the ports of the inner piston over the central aperture in the cover. The engines are made right or left-hand, as desired.

With the reversing engine the channeling on the cover and coring of the pistons is the same as in the engine built to run one way, but the ports in the inner piston are shaped so that they register over both the central and annular openings, using

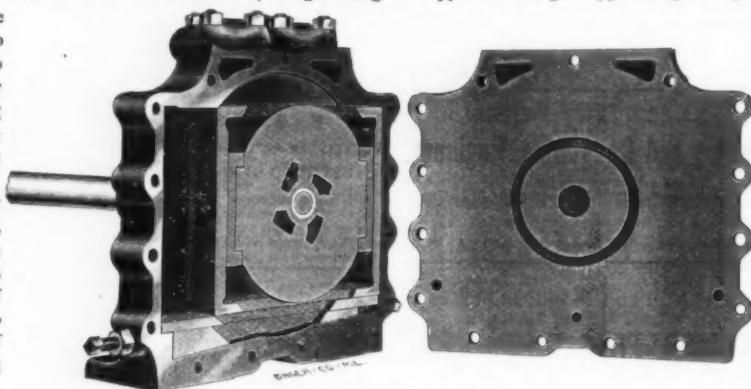


FIG. 3.—PISTONS IN PLACE.

each alternately as steam and exhaust. The ports on the top of the case being fitted with a suitable valve, which connects the channels leading to the working parts of the engine, motion is given to the engine either to the right or left, as desired.

There is not a bolt or nut inside of the case of these engines, or a piece of any kind to get loose, doing away with eccen-

trics and all parts connected with them. Lubrication is secured in a perfect and simple manner. They produce a perfect light with any good dynamo, and require no governor with ventilating fans and blowers.

Provision is made for taking up the wear of the working parts of the engine in a simple and effective manner. The inner

piston is fitted with slides that admit of a thin piece of tin or sheet iron being inserted when the wear is sufficient to allow it. A wedge-shaped plate, on which the lower slide rests, is arranged with set screws on the outside of the case (Fig. 1), which keeps the pistons steam tight top

and bottom. The packing of the cover to the pistons is effected by thin copper joints placed between the edge of the case and the cover. The pistons are made so that they are slightly thicker than the case they occupy, and enough copper strips are put

in to fill up the space; these joints are removed one at a time as the pistons wear down.

There is very little friction, and consequently slight wear on the pistons, from the fact that the steam pressure is inside of the inner piston, instead of against it, making the pistons what might be termed balanced valves.

Further information may be had on addressing the makers, or Chas. W. Melchor Machinery Co., 610 N. 4th street, St. Louis, Mo., C. S. Burt, 22 Union street, New Orleans, La., agents.

Improved Self-Feeding Gang Rip Saw.

The large illustration on this page represents the latest improved gang rip saw of the United States Machine Co., Williamsport, Pa.

The frame is heavy, solid and well proportioned. The arbor is made of steel, and runs in long, self-oiling boxes, is double key-seated and carries two saws, one being stationary and the other movable. The movable saw collar is fitted with an adjustable collar by means of which any lost motion may be taken up that may be caused by the shifter. The end box is of an improved design, and is very convenient for easily and quickly changing the saws when one set becomes dull.

The feed is very strong, yet simple and durable. Both front and back rolls are driven. The binder roll is attached to a heavy swinging frame, which is adjusted to the different thicknesses of lumber being sawed. There are two changes of feed, which are easily and quickly made.

An important feature of this machine is the device for connecting the T lever with the shifting collar. By means of a block sliding on a square guide, all weight is

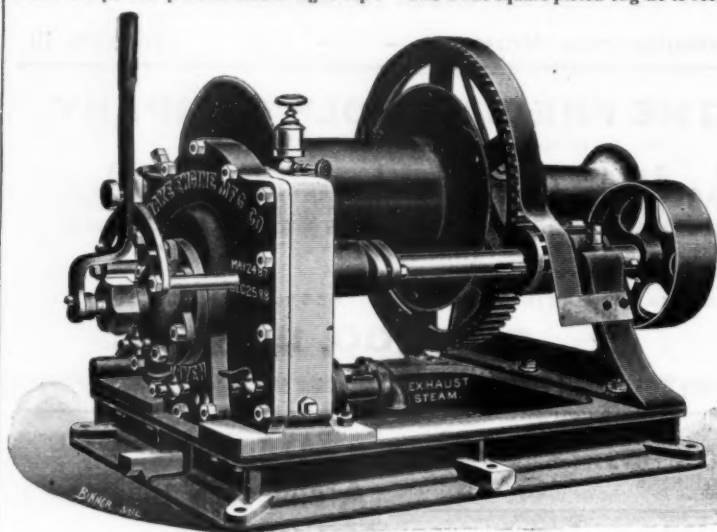


FIG. 4.—THE DUKE DOUBLE RECIPROCATING PISTON ENGINE.

position on the crank and carried to the extreme right-hand side of the case. Both pistons, as will be seen, have a horizontal movement, sliding from side to side, and at the same time the inner piston, to which the crank pin is attached, has a vertical or up and down movement, the two movements imparting a perfect rotary motion to the crank.

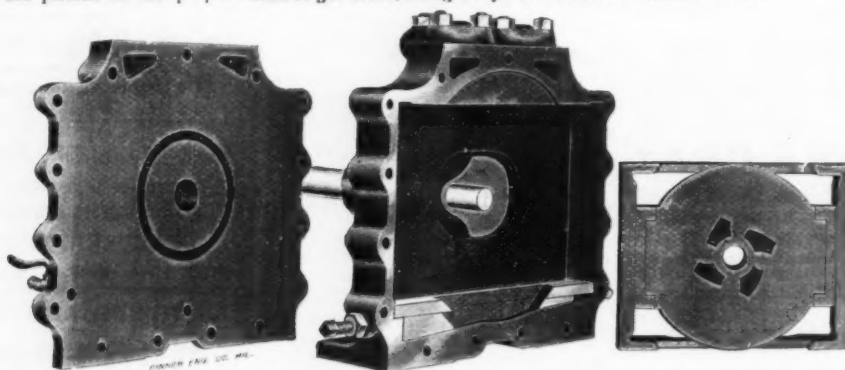


FIG. 2.—PISTONS REMOVED FROM CYLINDER.

The bearing for the main shaft and crank-pin are in the form of bushings, and are made from the best quality of phosphor bronze. From the manner in which steam is applied to the pistons the wear is slight when compared with the ordinary engine. When they need renewing the worn ones are driven out and the new bushings driven to place. Any good ma-

chine can do this, and at a small cost to the purchaser.

Everything about the inside of the engine is made interchangeable, and can be duplicated in case of accident on short notice.

The Duke square piston engine is recommended by its makers wherever a direct attached engine is needed, at either low or high speeds. They have been thoroughly tested and adopted by many of the leading ventilating fan manufacturers of the United States, and with dynamos for incandescent lighting, where their speeds do not exceed the maximum speed of the engine, they are giving perfect satisfaction. Parties experimenting with a view of securing the best results in lighting railroad trains with electricity, headlights for locomotives, smoke consumers for locomotives, and all similar classes of work, would do well to inquire into the merits of the Duke engine. They have also been applied in many cases to centrifugal pumps where the conditions under which they worked were of the most severe character and the results obtained were in every way satisfactory. They are strongly built, and so compact and self contained in every way that the ordinary jar of the railroad train, or working of a vessel in a heavy sea does not affect them.

taken off of the saw collar. The forked lever does not bear down on the collar, but is used only for shifting the movable saw. This device takes that much additional strain or wear off the arbor.

The floor stand is fastened to the floor

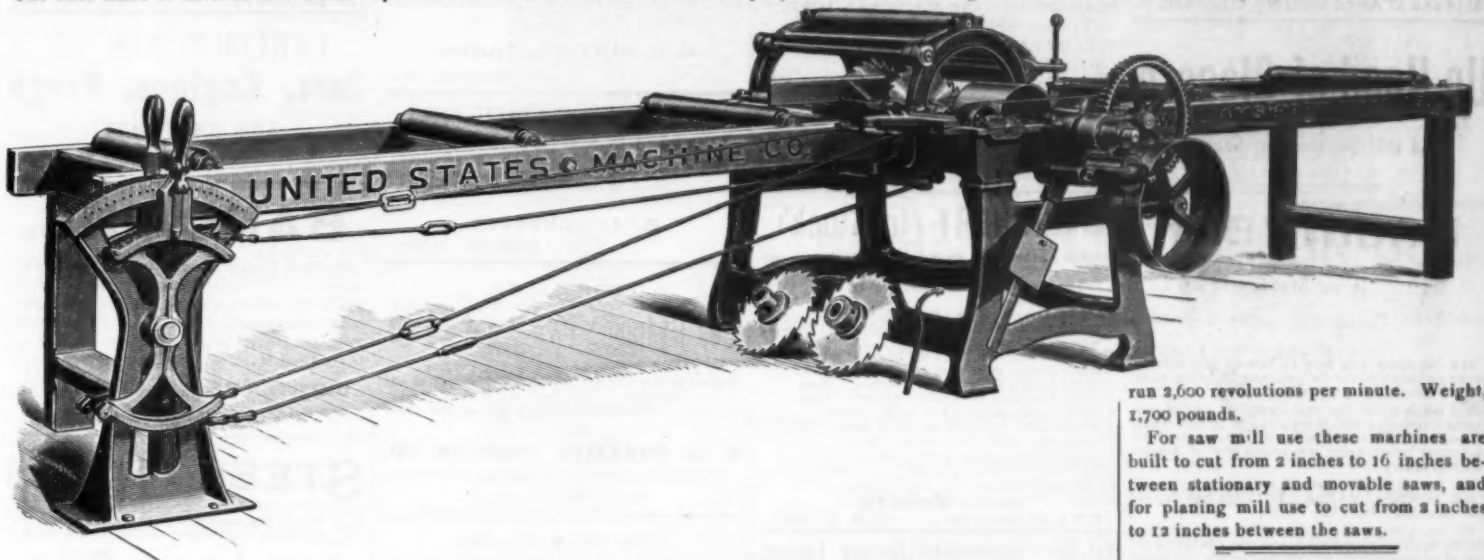
other T lever. By means of the turn-buckles in the connecting rods the saws can be adjusted to cut strong or scant sizes as desired.

The lever on one side of the floor stand operates the movable saw and the other

tionary and two movable saw collars; four saws, 14 inches in diameter, and necessary wrenches. The machines are built with floor stand, set works, &c., on either right or left-hand side, as desired. The accompanying cut shows a right-handed ma-

run 2,600 revolutions per minute. Weight, 1,600 pounds.

No. 2.—Will cut stock up to 30 inches wide and 4 inches thick. Diameter of saws, 14 inches. Pulley on arbor, 8 inches in diameter by $8\frac{1}{2}$ inches face, and should



IMPROVED SELF FEEDING GANG RIP SAW

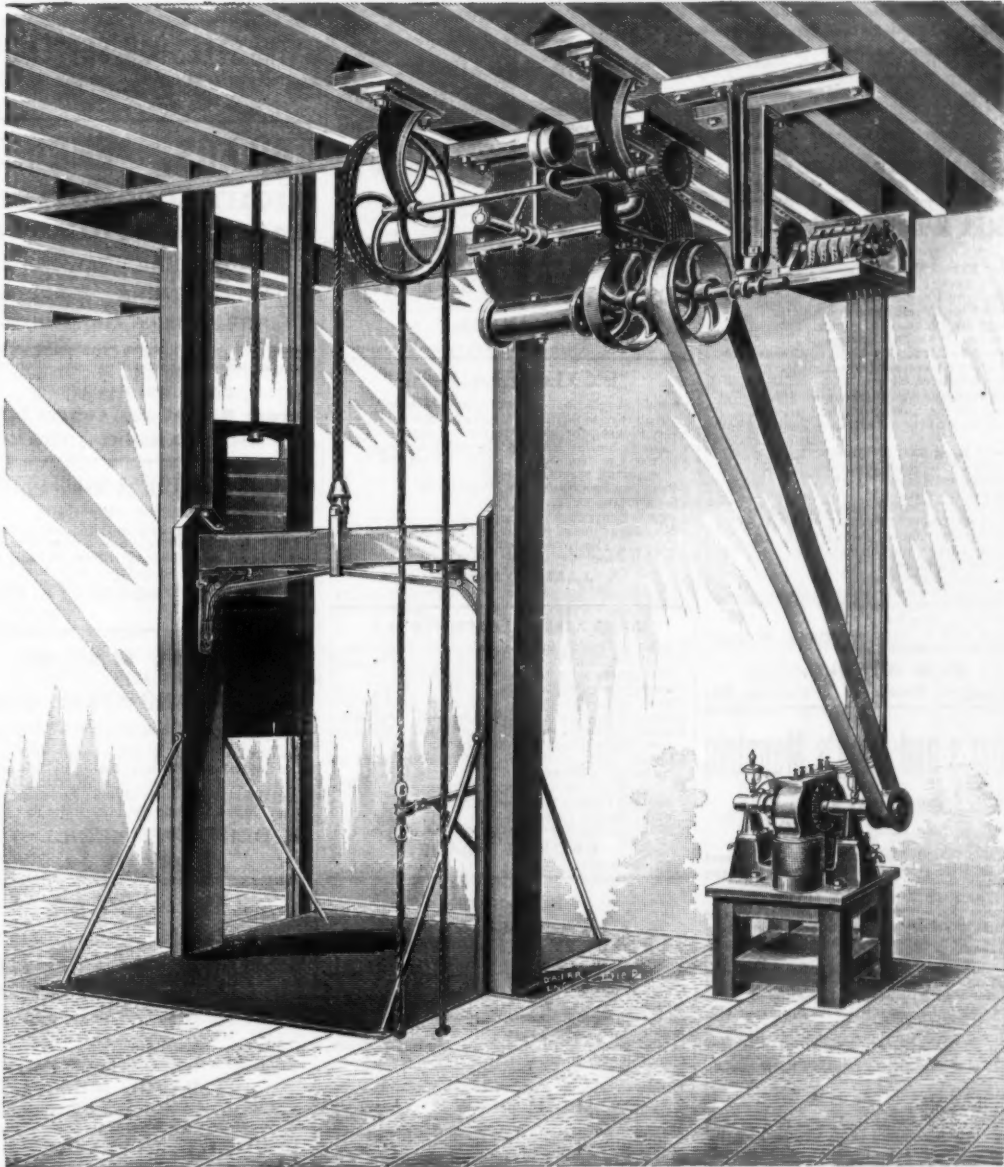


FIG. 1.—KEYSTONE REVERSIBLE ELECTRIC ELEVATOR MOTOR IN OPERATION.

convenient to the operator, and is graduated to quarters of inches. All iron connections are used between floor stand and the machine. The rods from the lever on one side of floor stand are connected with one T lever, and from the other side to the

lever operates the movable gauge, thus enabling the operator to cut the stock to the best advantage.

With each machine is furnished the front and back wooden frames, which are fitted with necessary iron rolls; two sta-

chine. Two sizes are built, as follows:

No. 1.—Will cut stock up to 26 inches wide and 4 inches thick. Diameter of saws, 14 inches. Pulley on arbor, 8 inches in diameter by $8\frac{1}{2}$ inches face, and should

run 2,600 revolutions per minute. Weight, 1,700 pounds.

For saw mill use these machines are built to cut from 2 inches to 16 inches between stationary and movable saws, and for planing mill use to cut from 2 inches to 12 inches between the saws.

Reversible Electric Elevator Motor.

The Keystone reversible electric elevator motor shown in the accompanying illustrations is guaranteed by its manufacturers to be superior in points of durability, efficiency and economy of operation. It is operated without rheostat or other outside resistance, the current being turned into the motor by means of the switch mechanism used in reversing the motor. The services of a skilled operator are not required to run the Keystone, as its operation is safe and reliable, the controlling and reversing switch being connected to and operating simultaneously with the brake mechanism of the elevator by means of the ordinary hand rope or any of the common devices used in starting and stopping elevators, the motor receiving the full force of the current without injury and without danger of burning out the armature. This motor is adapted to be connected with elevators or hoists of ordinary construction either by belt, as shown in the larger illustration, by gearing, or by coupling the armature directly to the end of the driving shaft of the elevator or hoist, as desired. It can be started or

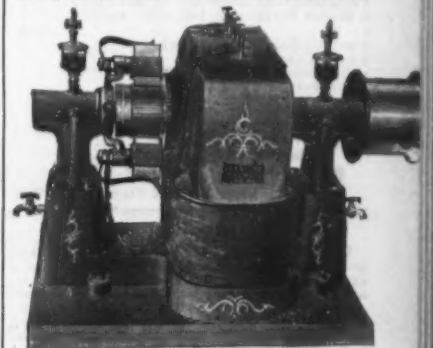


FIG. 2.—KEYSTONE REVERSIBLE ELECTRIC MOTOR.

stopped instantly without the slightest jerk or jar, and reversed and started in the opposite direction from any point with perfect safety. In operation the motor only runs while the elevator is in actual use, thus effecting considerable economy both in the use of the current and the wear and tear of the machinery.

The controlling and reversing switch mechanism is extremely simple in construction, and is substantially made, as are all the parts of the machine, such as the automatic self-oiling bearings, non-wasting oil cellars, sight-feed oil cups, etc. Every machine is carefully tested and the parts numbered before they leave the works, and instructions are given so that any experienced wire man can readily construct the machine. These motors have been in continual use and at hard service at Pittsburgh and Erie, Pa., and at other points for months past, and it is said that all the points of superiority claimed for them have been fully demonstrated. They are manufactured by the Keystone Electric Co., Erie, Pa.

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1 Planer, planes 6 ft. 24x24 in.
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1 " 30x30 in. x 6 ft.
1 " 32x32 in. x 10 ft. 42x36 in. x 12 ft.
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TRADE NOTES.

THE Cordesman Machine Co., of Cincinnati, has recently equipped the Hauser, Brenner & Fath Cooperage Co., of that city, with a complete outfit of special machinery to manufacture beer and wine casks.

THE Vulcan Road Machine Co., of Charlestown, W. Va., are the only manufacturers of their line of machinery south of Pennsylvania. The new Pennock reversible road machine, which is the principal product of the factory, is the result of years of experience in the manufacture of road and street grading machines, and it possesses several important superior features. It has proven a most profitable tool in the improvements made in the many new Southern towns, and there is such an increasing demand for it that the Vulcan Company is increasing the capacity of the plant at Charlestown. Among the recent orders received for the machines are the following: Moundsville, W. Va., Manufacturing Co.; Glendale Co., Marshall Co., W. Va.; and two machines to land companies in Brunswick, Frederick Co., Md.

THE twenty-fourth annual issue of Poor's Manual of Railroads is now ready for delivery, and may be obtained from the publishers, H. V. & H. W. Poor, 70 Wall street, New York. In the past ten years the Manual has kept pace with the times and with the development of the railway system by introducing many new and important features which have tended to simplify and at the same time very greatly enhance the value of its statements to the investor, banker or railway man. The new Manual is considerably larger than any previous number, and more than 200 pages larger than the edition for 1889. Of this increased size over 50 pages are taken up by specially engraved maps of the leading railway systems of the country. The introduction to the Manual presents this year the features of an unusually elaborate summary of the financial condition and operations of the railroads of the country in 1890 and during the decennial period just closed with census year of 1890. The publishers of the Manual now issue two supplementary volumes, one entitled "Poor's Directory of Railway Officials," the other, "Poor's Hand-book of Investment Securities." In the first is given, in addition to a full list of the railroad companies of the United States, Canada and Mexico, and of the important officers connected therewith, detailed statements of the railroads of other American States, of private tramways and of the street railways of the United States and Canada. "Poor's Hand-book of Investment Securities" covers the entire field of investment in the United States; the financial condition, indebtedness, sources of income, assets and population of every State, county, city and town issuing its obligations for any purpose.

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Powell's patent improved, class "A," star-sight and up-feed lubricator is shown in the accompanying illustration:

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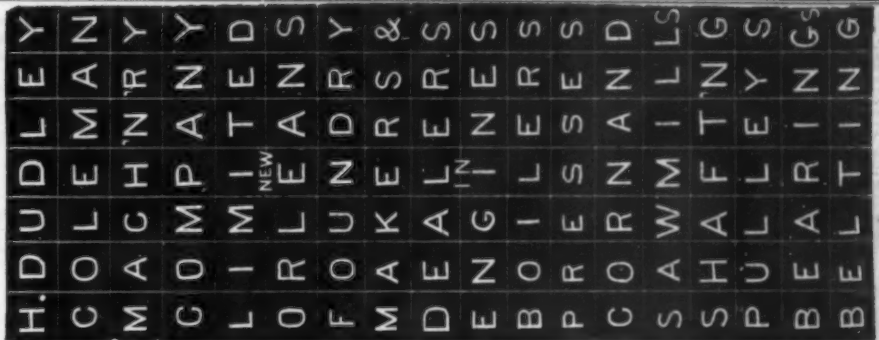
The ejector valve "D" enables the engineer to start or stop the operation of the oil feed at any time without disturbing the adjustment of the drop valve "C" when once set. There are no joints about this cup, the arms, body and connections being all cast in one piece, thus avoiding the

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The Powell lubricator is provided with a drain valve in the bottom of the chamber



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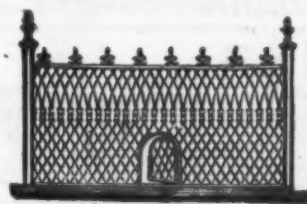
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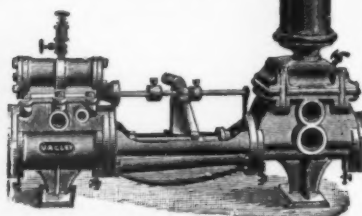
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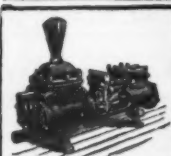
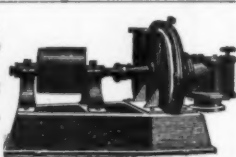
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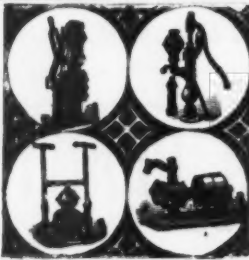
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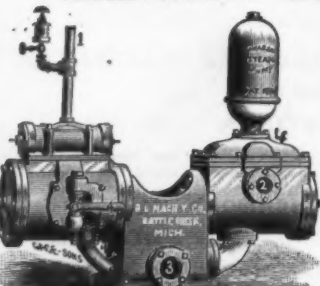
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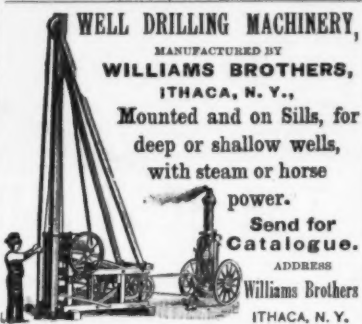
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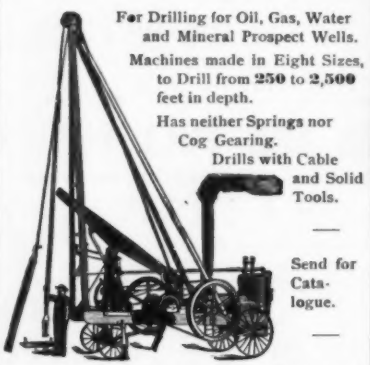
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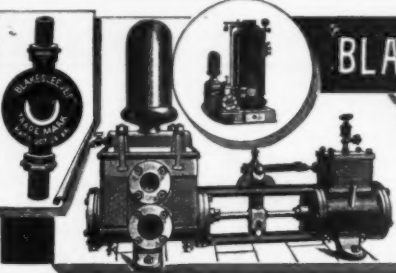
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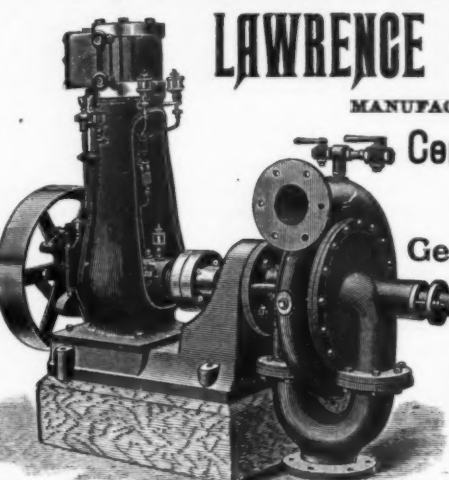
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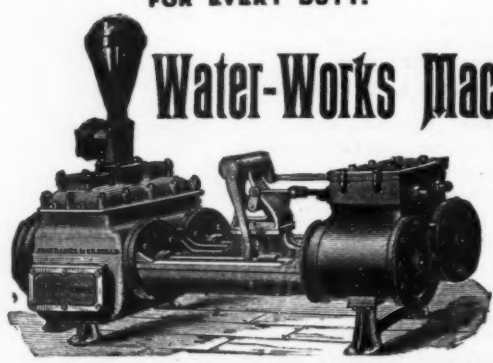
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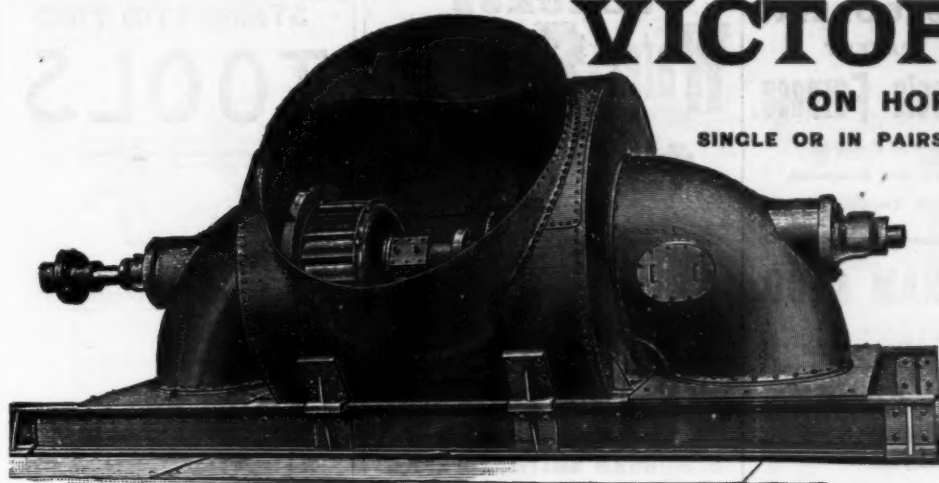
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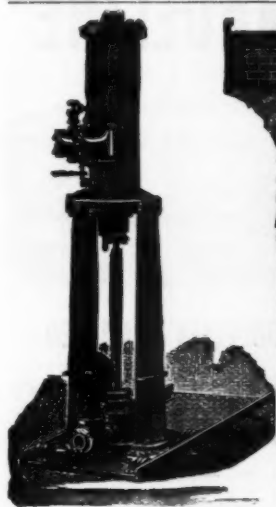
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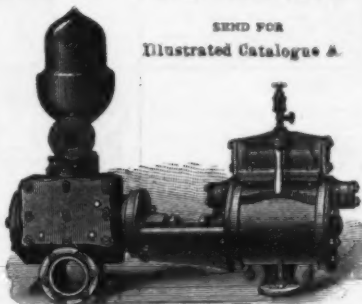
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RAILROADS and
FILLING TANKS,
CRANK and
FLY WHEEL
And VACUUM



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Illustrated Catalogue &

SIMPLE,
COMPACT,
DURABLE,
EFFICIENT.

ADAPTED TO
ALL PURPOSES

NO OUTSIDE
VALVE GEAR

The A. S. Cameron Steam Pump Works,
Foot of East 23d Street,
NEW YORK.

Piston Pattern.

Plunger Pattern.

PUMPS

We manufacture direct acting Duplex and Crank and Fly Wheel Steam Pumps for all services. Brass Founders and manufacturers of Brass and Iron Body goods. Straightway valves, etc. Iron Pipe and Fittings and Mill Supplies. Boiler Feed Pumps a specialty. Address

THE JOHN H. McCOWAN CO.

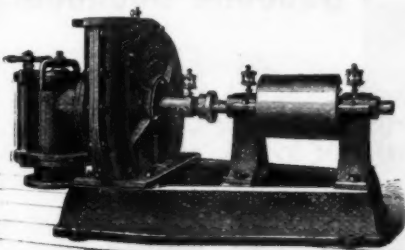
42, 44, 46 Central Ave., CINCINNATI O | Branch House, 1425 E. Main St., RICHMOND, VA.

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OVER 20000 BEST AND CHEAPEST STEAM PUMP KNOWN IN USE FOR ALL PURPOSES

PULSOMETER STEAM PUMP CO. SOLE OWNERS-NEW YORK.

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Send for Catalogue.

HEALD & SISCO CENTRIFUGAL PUMPS

17,000 in Use.
Capacity 40 to 50,000 Gallons Per Minute.

ALL SIZES IN STOCK. Guaranteed superior to any other make. Our special Dredging Pumps will pass solids 10 in. in diameter. Our Sand Pumps can be seen running in St. Louis, Kansas City, Chattanooga, Memphis, Decatur, Louisville and many parts of the South.

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Baldwinsville, N. Y.

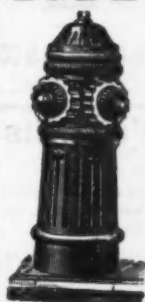
LUDLOW VALVE MFG. CO.

Office and Works: 938 to 954 River St., and 67 to 83 Vall Ave., Troy, N. Y.

VALVES

Double and Single Gate, 8 inch to 48 inch; outside and inside Seewers, Indicators, etc., for Gas, Water, Steam, Oil.

SEND FOR CIRCULAR.



Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves.

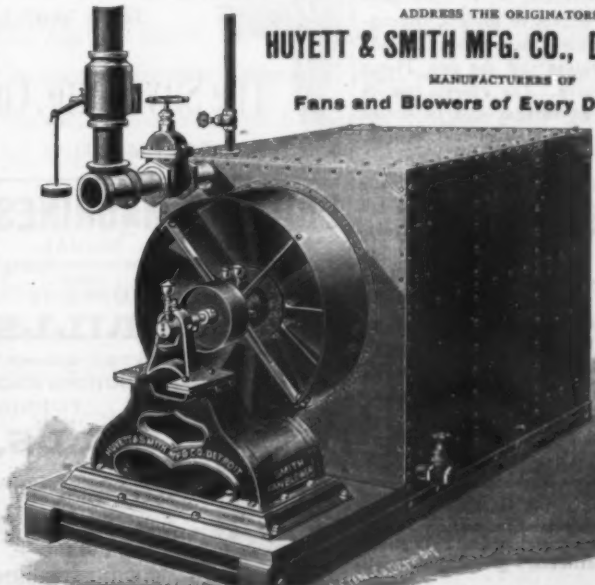
Now is the time to arrange for Heating and Ventilating your Factory, Store, Church, Theatre or School by the Hot Blast System.

ADDRESS THE ORIGINATORS,

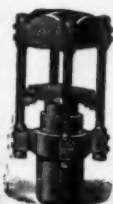
HUYETT & SMITH MFG. CO., Detroit, Mich.

MANUFACTURERS OF

Fans and Blowers of Every Description.



HYDRAULIC PRESSES and PUMPS FOR ALL PURPOSES.



Forging Press.

Baling Presses,
Oil Presses,
Car Wheel Presses,
Crank Pin Presses,
Embossing Presses,
Die Presses, and
All Kinds of Presses.

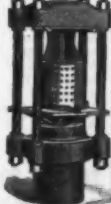
WATSON & STILLMA.



Plain Press.

Hand Pumps,
Belt Pumps,
Steam Pumps,
Automatic Pumps,
Variable Delivery Pumps,
and over 50 kinds of
Pumps, Accumulators,
Valves, Gauges,
Fittings, &c.

204-210 E. 43d St., New



Curb Press.

TRADE NOTES.

THE Cordesman Machine Co., of Cincinnati, Ohio, have recently shipped a handsome lot of woodworking machinery to the navy-yard at Kittery, Maine.

THE planing mill, sash, door and blind factory of the Sturdevant-French Manufacturing Co., Radford, Va., will be sold at public auction, September 30. This is a new and valuable plant having no competition. The terms of the sale are easy, and this looks like a good chance for the right man.

MR. EDWIN CRAMP, of the Messrs. Cramp, Philadelphia, who recently gave B. F. Sturtevant, of the Sturtevant blower system, an order for 100 of their famous blowers, says that his company considers these blowers the best in the world. The amount of the Cramps' order is nearly \$100,000. The Sturtevant Co. say their blowers are also being used extensively abroad.

CHAS. P. WILLARD, manufacturer of portable, stationary marine steam boilers and engines and steam launches, at Chicago, Ill., has recently shipped a complete outfit of marine machinery to Burmah, India, for use on the waters of the Indian Ocean. This is a matter of news that we take pleasure in publishing. American marine machinery builders are sure to corner any foreign market after their machinery has once been tried.—The Marine Journal.

THE fine furnace property advertised for sale by "Furnace" in this issue of the MANUFACTURERS' RECORD is most advantageously located. The pig iron produced by this furnace from ore right on the ground has been pronounced first-class by the largest steel works in the world, and the cost of production is extremely small. Other information about the property is given in the advertisement. The owner will sell on account of ill health and advanced age. This is worth an investigation.

FOR INFRINGING PATENTS.—The Allington & Curtis Manufacturing Co., of East Saginaw, Mich., began suit yesterday against the Chicago Desk Manufacturing Co. in the United States Circuit Court for the northern district of Illinois, for infringement of patents. This company claims to own the only patents for apparatus for dust collecting, and this suit will be looked upon with interest by all persons who have purchased dust separators or collectors from others than this company. June 14, 1891, suit was brought against August Hauske, of Chicago, for infringing seven of their patents.—Chicago Tribune.

THE Pierce, Butler & Pierce Manufacturing Co. at Syracuse, N. Y., have published several attractive folders, illustrating and describing their famous Florida green-house heaters and the new Pierce improved air valve. The Florida heaters possess many advantages and important new features. Any kind of fuel, hard or soft coal, coke or wood, can be used as a fuel, and the green-house heaters are made for any size green-house for either hot water or steam heating. They are also recommended for simplicity, durability and efficiency. The Florida heavy duty, steam and hot water heater is designed to supercede wrought iron tubular boilers for heating large buildings, etc. The manufacturers claim that they are economical, absolutely safe and durable. Pamphlets describing these heaters will be mailed upon application to the Pierce, Butler & Pierce Manufacturing Co., Syracuse, N. Y.

SECOND-HAND cotton machinery in good running order is offered for sale on page 48 in this issue by Davol Mills, Fall River, Mass. Full particulars given upon application.



The COLLIAT PATENT Cupola Furnace.

Adapted to all Foundries,
The Most Economical,
The Lowest in Price.

MANUFACTURED EXCLUSIVELY BY

BYRAM & CO.

DETROIT, MICH.

JOHN T. FOLEY,
Contract Pipe Layer.

HOME ADDRESS:

NASHVILLE, TENN.

Correspondence Solicited.



Lying Agents can't SELL, and tell the truth about JONES. Put your line on paper and sign if you dare.
U. S. STANDARD
**\$60.5 TON
WAGON SCALES.**
Beam Box. Tare Beam. Freight Paid. Free Price List. Every Size. Address JONES OF BINGHAMTON, BINGHAMTON, N. Y.

ANTI-MOTH.

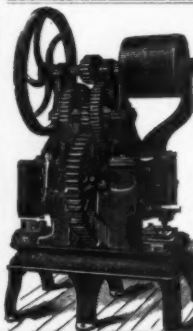
Certain; sure; no lie or trick; we don't believe in either.

We tell the truth, you do the rest (no insinuation intended, dear reader).

Red Cedar Moth Proof Chests; handsomely made.

Write us for a \$12 chest, delivered free of charge in any part of the United States; that is, "we pay de freight." This offer for immediate acceptance only.

HARRY MYERS MFG CO.
NASHVILLE, TENN.



**Power
Punches
—AND—
Shears
Combined.**

Double Power Punch.
Double Power Shears.

G. D. COLTON & CO.
GALESBURG, ILL.

Blacksmith's Drills.

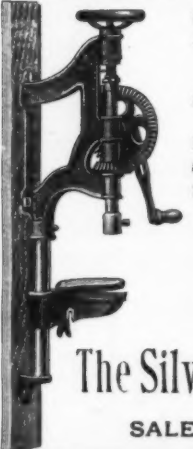


Fig 730, No. 1 1/2.
Has 1 in. Steel Spindle, bored for 1/2 in. Drill Shanks.
Extension Crank, 12 in. Swing.
DRILLS 1/2 IN.
55 POUNDS, \$6.00.
Nos. 2 and 3 are Double Back Geared, Self-Feed.
\$10 and \$14.

TRY A SAMPLE.

The Silver Mfg. Co.

SALEM, OHIO.

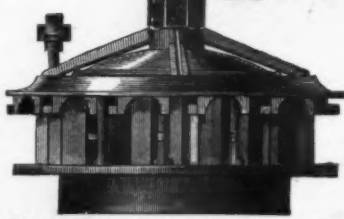
DRILLING MACHINES.



RADIAL,
Universal Radial
—AND—
UPRIGHT
DRILLS.
Single-column
BORING AND
TURNING
MILLS.

For complete Catalogue and Low Prices, address
BICKFORD DRILL CO.,
173 E. Front Street,
CINCINNATI, OHIO.

SUCCESS Water Wheel.



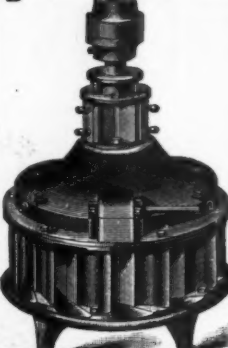
This Wheel is strong and durable. Excelled all other wheels in the great trial tests. Is in use all over the nation. I also make a specialty of

HEAVY GEARING & MACHINERY

For Paper, Cotton and Grist Mills.

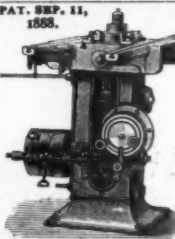
S. MORGAN SMITH, York, Pa.

BURNHAM'S STANDARD TURBINE.



It gives on either a Vertical or Horizontal Shaft more power for its price, yields a greater percentage of water used, either with full or part gate drawn, and is the simplest constructed and best finished Wheel ever offered for sale. Send for catalogue to

BURNHAM BROS.
YORK, PA.



KEY-SEATERS.

PORTABLE and STATIONARY.
Rack-Cutting and Key-Making Machine Attachment.

GIANT KEY-SEATER COMPANY,
East Saginaw, Mich.

SEND FOR OUR FIFTH EDITION HOW TO SELECT, LAY AND PAINT A TIN ROOF.

SENT FREE OF COST.
MERCHANT & CO.

PHILADELPHIA. CHICAGO.
NEW YORK. KANSAS CITY.

ALLENTOWN FOUNDRY & MACHINE CO.
ALLENTOWN, PA.
MACHINERY
FOR MINING & MANUFACTURING
PAINT LIGHT & HEAVY
POWDER MILLS MILL GEARING.
CEMENT & BARK SHAFTING, PULLEYS.
CLUTCHES, HANGERS.
IMPROVED EUREKA TURBINE.
BLAST FURNACE WORKS, HOT BLAST
BELLS, HOPPERS, STOVES.
CASTINGS HEAVY OR LIGHT—MADE TO ORDER.

STAND PIPES

At the following Places:

Kankakee, Ill.,	30X124
Cornwall, Ontario,	30X130
Salisbury, N. C.,	30X100
Washington, Ind.,	30X108
Beaver Dam, Wis.,	30X84
Waterford, N. Y.,	30X52
Berwick, Pa.,	11X45
Homer, N. Y.,	35X40
Cobourg, Ontario,	16X116
Marshall, Mich.,	39X100
Hamburg, N. Y.,	16X125
Canton, N. Y.,	36X73

SHARON BOILER WORKS,
(Limited.)
SHARON, PA.

STARRETT'S FINE TOOLS



Skilled mechanics prefer them.
Live Dealers sell them. Catalogue sent for the asking.

L. STARRETT
ATHOL, MASS., U. S. A.

"MADELINE"



PORCELAIN ENAMELED

IRON BATHS.

The most durable, attractive and sanitary Tub in the market. The cut illustrates the "Madeline" pattern—something new. Being square at both ends, it allows for the greatest body of water in the least space. Another feature is that there is absolutely nothing inside the Tub to retard movement, only a small bell mouth inlet for the water near the bottom. We guarantee every Tub.

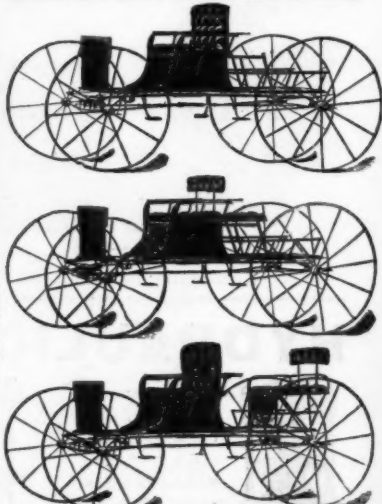
HAINES, JONES & CADBURY CO.

MANUFACTURERS OF

High-Grade Plumbing Goods,

1136 Ridge Avenue, Philadelphia.

Babcock Buckboard



THREE CARRIAGES IN ONE.

Ask your dealer for our work or write to
E. H. BABCOCK CO., Watertown, N. Y.
Also 406-412 Broome St., New York City.

COVINGTON
THE **GEM** OF
THE **MOUNTAINS**

THE MONT HOUSE Will open
Mar. 1st 1891.
Heated by Steam,
Lighted by Electricity,
All modern improvements.

1200 Feet above the Sea.
Pure Mountain Air. No Malaria. No Mosquitoes.

**CHEAP IRON,
CHEAP COAL,
CHEAP TIMBER,
CHEAP LIVING.**

If you want to be thrifty and live
to a ripe old age come to -
Covington, Va.

C. & O. SOLID VESTIBULE LIMITED TRAINS DAILY

ANNOUNCEMENT.

The Covington Improvement Company has acquired over 700 acres of land contiguous to the town of

COVINGTON.

This property is laid off in Residence and Industrial Lots. The most liberal provisions have been made for the accommodation of industries. It is useless to repeat the details of the many advantages of Covington and the prospective enhancement in values of the property of the

Covington Improvement Company.

Suffice it to say, Covington is in the heart of the richest Ore deposit of Virginia, and nearer to the Coal and Coke of West Virginia than any other point on the Chesapeake & Ohio Railroad.

There are now located and under construction in Covington the following enterprises:

A 125-Ton Blast Furnace, employing.....	150 men.
Rolling Mill, employing.....	125 "
Foundry and Machine Shops, employing.....	75 "
Patent Roller Flouring Mill, employing.....	15 "
40,000 Daily Capacity Brick Plant, employing.....	30 "
Lumber and Planing Mill.....	15 "
Steam Laundry—one of the best in Virginia—employing 6 girls.	

One National Bank in successful operation with a line of Individual Deposits of over One Hundred and Thirty Thousand Dollars (\$130,000.) Only in operation about (4) four months.

The Hot Springs Branch of the Chesapeake & Ohio will be completed by July 1st, 1891, making Covington the gateway to the

Hot, Warm and Healing Springs,

where several millions will be spent in the next few years developing these three famous watering places, with the assurance that the "Camden" road will be built within fifteen months, giving a direct line from Pittsburg to the celebrated Ore fields of "Potts Creek," and making

Covington a Great Center for Manufacturing

the raw material (lumber and minerals) lying in the immediate vicinity, and penetrated by the "Camden" and Chesapeake & Ohio Railroads. No other point in the State of Virginia is so favored for

Locating Industrial Enterprises,

and all investments made at Covington will yield handsome profits in the near future.

NORFOLK, VA.

THE GREAT SOUTHERN SEAPORT.

Attention of manufacturers and others seeking investment or establishment in the South is called to the following facts:

Norfolk has the most magnificent natural harbor of the Atlantic Coast, having no bar to block its entrance, being within 25 miles of the ocean, sheltered from all vicissitudes of weather, always free from ice, with sufficient depth of water for the deepest draft vessels.

Hampton Roads, at the confluence of the James and Elizabeth rivers with the Chesapeake bay, is easy of access, navigable for vessels of any size or draft.

It has been designated by Congress as the rendezvous for the navies of the world in 1892-'93.

A 26-foot channel, well marked with buoys and light houses, leads to the wharves of Norfolk, and above the city to the Navy-yard.

Seven broad-gauge and two narrow-gauge railroads, controlling an aggregate of over 17,000 miles, put Norfolk in connection with all the points reached by railroads in this country, and two

The water supply is derived from large lakes of spring water seven miles distant, good not only for household use, but admirably adapted for manufacturing purposes, being absolutely free from all those substances that corrode boilers.

The climate, tempered by the proximity of the Gulf Stream, is mild. There is hardly ever ice or snow to interfere with out-door work or exercise.

The city is lighted with electric lights, and has as fine a fire and police department as any in the country.

All denominations are well represented in churches.

There are two good hospitals, one in charge of the Sisters of Charity, and the other under the Protestant organization of the city.

Educational advantages are excellent, there being a thorough system of public schools, together with numerous private seminaries for both sexes.

There are two good theatres, at which the best companies stop on their pilgrimages from the North to the South.

This is one of the largest pine lumber markets in the South; 350,000,000 feet were shipped in 1890.

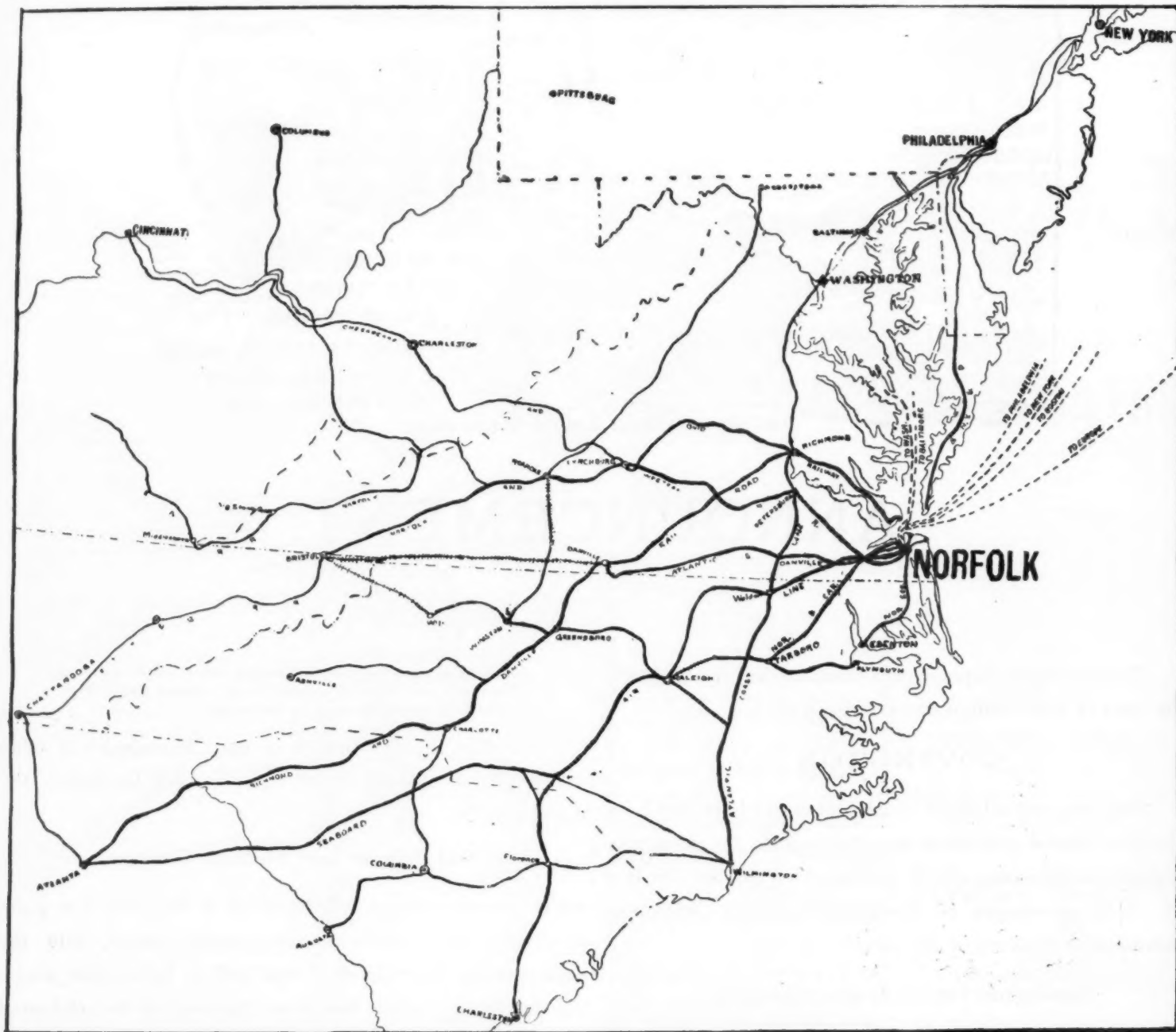
The best bituminous coal and coke are supplied by the C. & O. R. R. and N. & W. R. R.

Pig iron is delivered here by these two railroads.

Roller iron and all of its products can be promptly and cheaply freighted by water to all of the leading seaports.

600,000 bales of cotton are annually marketed here, which makes this the most desirable point for the manufacture of cotton goods in the United States, superior to inland towns throughout the cotton belt, because a factory located in these is dependent on the local product marketed in three or four months, after which it has to draw from distant points or carry a sufficient stock for the year, or if the quality or grade in the locality is unsuitable, it is subjected to the expense of freight from distant points; but Norfolk being a large cotton market, not only furnishes an assortment of grades and quality, but enables the manufacturer to purchase his stock all the year.

It is superior to other seaports from its accessibility to New York, Boston and other markets or such supplies as the manufacturer frequently needs on short notice, while its railroad lines to the interior distribute goods to all points.



canals connect with the Sounds through the Carolinas.

First-class steamship lines ply to Boston, Providence, New York, Philadelphia, Baltimore, Washington, Richmond and other points on the Coast and Sounds.

Norfolk is within 20 hours of Boston by rail and 40 by water.

12 hours of New York by rail and 21 by water.

10 hours of Philadelphia by rail and 18 by water.

8 hours of Baltimore by rail and 12 by water.

7 hours of Washington by rail and 12 by water.

2½ hours of Richmond by rail.

23 hours of Cincinnati, and 34 hours of Chicago and St. Louis by rail.

A regular line of passenger and freight steamships ply to the Brazilian ports, and steamships, chartered mostly for the carriage of freight, ply to Liverpool and other European ports.

In 1883 the aggregate trade of Norfolk was placed at \$38,200,435, while five years later, in 1888, it had risen to \$65,011,656; in 1889 it increased to \$75,000,000, and in 1890 to \$100,000,000. The vessel tonnage of Norfolk in 1870 was 13,502 tons, cargoes valued at \$886,594; in 1880 it increased to 103,608 tons, valued at \$11,116,595; in 1887, 257,884 tons, valued at \$14,714,404; for the year 1890 the tonnage reached 582,846, valued at \$15,197,095.

It will be hard to find a parallel case in this country in two decades showing an increase of tonnage from 13,502 tons in 1870, valued at \$886,594, to 582,846 tons in 1890, valued at \$15,197,095.

The population of Norfolk, including Portsmouth, Berkley and other suburbs, is 70,000; the increase within the city limits has been 61 per cent. in the last ten years.

This increase, with the growth of business and enhancement of value in property of all kinds, is turning the attention of capitalists and investors to this point.

The City of Norfolk has a complete system of sewerage and is well paved.

The healthfulness of the climate, as exhibited by the death rate, is not surpassed by any city in the country, the percentage being in 1890 16.90 to the 1,000.

In addition to the manufacture of cotton and iron, there is at Norfolk opportunity for profitable manufacture of furniture and all articles made of wood, such as ash, oak, pine, poplar cedar, cypress, juniper, gum, and for the manufacture of safes, stoves, hardware, sash, door and blinds, etc.

The cost of labor ranges from \$1 to \$1.50 per day for unskilled men, and \$2 to \$5 for skilled men; females 50 cents to 75 cents a day unskilled, and 75 cents to \$2 a day for skilled; boys 33 cents to \$1 per day; girls 25 cents to \$1.25 per day.

The above quotations are for white labor.

Unskilled negro labor can be employed at 80 cents to \$1 for men and 50 cents for women.

Norfolk has been exempt from those labor troubles and strikes which have characterized Northern manufacturing cities.

The surrounding country being the great vegetable-growing section of the seaboard, and the rivers and bays being filled with the finest fish and oysters, make living cheap and healthy.

Although in banking facilities Norfolk is fairly well supplied, there being nine banks with an aggregate capital of about \$1,000,000 and aggregate deposits of about \$5,000,000, there is, however, a good opening for another bank.

Norfolk offers a field for the establishment of jobbing houses in dry goods, boots, shoes, hats, caps, notions, drugs, tinware and all other kinds, excepting wholesale groceries, in which she is well supplied.

The country lying to the southward west of Norfolk furnishes the markets to which goods from here are distributed in exchange for cotton, corn, wheat, peanuts and other crops.

The NORFOLK INDUSTRIAL DEVELOPMENT CO. has been organized for the purpose of furnishing information and assisting the establishment of manufacturing enterprises.

Free sites can be obtained on the railroad lines around the city, and reasonable subventions will be made to the stock of manufacturing enterprises, provided they are meritorious, but no proposition will be entertained from any but bona fide concerns, using good machinery and stocked on a business-like basis.

Capital invested in machinery is exempted from taxation for ten years, and will probably always continue so.

For further particulars, address

WALTER F. IRVINE,

SECRETARY NORFOLK INDUSTRIAL DEVELOPMENT CO.

VIRGINIA IN THE LEAD!

VIRGINIA STEEL, IRON & SLATE CO., Richmond, Va.

Capital \$2,000,000, in Shares of \$100 each, par value,

Chartered under the laws of Virginia.

OFFICERS.

F. T. ANDERSON, Howardsville, Va., President and General Manager.
I. E. GAINES, Richmond, Va., Treasurer.
J. G. HANKINS, Richmond, Va., Secretary.
T. P. WILLIAMS, Lynchburg, Va., Mining Engineer.

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WM. G. TAYLOR, Richmond, Va. T. P. WILLIAMS, Lynchburg, Va.
J. J. HICKOK, Richmond, Va.

LOGAN CITY, VA.

And the Virginia Steel, Iron & Slate Co.



Favorable Reports from Professors Rogers, Campbell, McDonald, Hotchkiss, Procter and Williams.

WHEN the attention of capitalists and others was directed to the vast resources of the South, some years ago, the general rush then was for North Alabama; afterwards the claims of North Georgia, North Carolina and East Tennessee commanded notice, but now "Old Virginia" has the lead, and in the heart of Virginia's Mineral or Piedmont Section is LOGAN CITY, on the borders of the counties of Albemarle, Nelson, Buckingham and Fluvanna.

LOGAN CITY is so situated that the numerous leads, veins and deposits of steel-making ores, gold and copper ores, slate and soapstone, limestone and manganese and other valuable minerals are on every side, in every direction, and near at hand. Nature has wondrously favored this place as a location for furnaces, ferro manganese works, slate and stone works, woodworking plants, factories, lumber mills, woolen mills and other mills and works, which altogether would make Logan City a great city of diversified industries. The different works could defy competition and would pay handsome profits; and the shares of the Virginia Steel, Iron and Slate Company, of Richmond, Va., would become valuable. Eminent geologists and mining experts have visited and examined the mineral section and leads of ores near Logan City, and their favorable reports are printed in the prospectus of the company, which, besides official statements, reports, analyses of ores, etc., contains a number of views photographed from different points. The capital of the

Company is two million dollars (\$2,000,000), in shares of \$100 each, and that every two shares carry a free lot bonus; and every twenty shares (\$2,000) will carry a villa site (not less than one-half acre) in addition to ten lots in Logan City.

The payments for shares are easy, namely, five dollars at time of subscription, and not more than ten dollars per share is to be paid at each assessment, and assessments in no case to be made oftener than once a month. About 4,000 acres are suitable for a residence and business city, and the balance of the properties which have been secured (about fifteen thousand acres) are selected mineral tracts. No place in the South offers better advantages for investors, manufacturers, etc., than Logan City, and no company has better or brighter prospects before it than the Virginia Steel, Iron & Slate Company. Send for a prospectus to Richmond, Va., and be convinced. Free sites and other privileges will be granted to manufacturers and others who will establish works and industries at Logan City.

In the prospectus will be found a highly favorable report from the pen of Prof. John R. Procter, Chief State Geologist of Kentucky, and a most practical report from the practical and experienced mining expert, Thos. P. Williams, M. E., who has had nearly forty years' experience in the mining and geological world.

WRITE FOR ANY PARTICULARS TO THE

VIRGINIA STEEL, IRON & SLATE CO., - RICHMOND, VA

LEXINGTON, VIRGINIA.

THE ATHENS OF THE SOUTH.

The Seat of the Virginia Military Institute and the Washington and Lee University.

The Very Center of the Tremendous Development of the Shenandoah Valley. Equi-Distant from Glasgow and Goshen, from Buena Vista and Cornwall

THE MOST DELIGHTFUL PLACE OF RESIDENCE IN VIRGINIA.

THE LEXINGTON DEVELOPMENT COMPANY

Has acquired beautiful lands bordering the corporate limits, laid them out into streets and lots, secured large and valuable industries, and now offer its lots to the public. These lots furnish an opportunity to secure homes in this town of 4,000 cultivated refined people, the capital of the county of Rockbridge, where living is good and cheap, where educational facilities are unsurpassed, and where chances for profitable speculation could not be better. These lots will be sold at low prices and upon favorable terms. There will be no auction sale, but purchasers can buy at any time through the real estate agents. Address

J. D. H. ROSS, President, or J. McD. ADAIR, Secretary and Treasurer.

THREE REGULAR STEAMSHIP LINES

HAVE JUST BEEN ESTABLISHED ON FIVE-YEAR CONTRACTS TO RUN FROM

Newport News, Va.

TO

LIVERPOOL, LONDON AND GLASGOW.

Newport News

Is the most rapidly-developing new seaport in the world.

It is the only port South of Baltimore that has a regular Steamship line to Europe.

It has three and others are under negotiation.

It has a 1,500,000 bushel grain elevator.

It will ship millions of bushels of grain this summer and fall.

It ships about 1,000,000 tons of coal a year to New England ports.

It has splendid piers and wharves, and a harbor big enough and deep enough to accommodate the "navies of the world."

It has the largest and best Iron and Steel Ship Building Yard in America, built by Mr. C. P. Huntington at a cost of \$3,000,000, now employing about 2,000 skilled mechanics, to be increased to 5,000.

IT IS THE FUTURE GREAT SEAPORT AND INDUSTRIAL CITY OF THE SOUTH.

Unequalled advantages for many lines of manufacturing and for general business.

FOR INFORMATION ADDRESS

C. B. ORCUTT, President Old Dominion Land Company,

No. 1 Broadway, New York.

The Property of the Newport News Company.

Much has already been said of the marvelous development of the wonderful resources of Newport News, Va. In fact, it is one of the best advertised towns in the United States, and thousands of people and millions of dollars have been attracted to this favored point. The large and complete dry-dock and ship-building plant, the enormous grain elevator, elegant hotel, liberal banks, and numerous smaller but equally prosperous industries now support 8,000 thrifty, industrious and progressive people. These are but the advance guard of those that are certain to follow, and a population of 30,000 is confidently predicted ere the lapse of half a decade. Newport News, by its situation at the mouth of James river, on Hampton Roads, first attracted the attention of the Chesapeake & Ohio Railroad, which made it the deep water terminal for its vast system. It admittedly has one of the best harbors on the entire Atlantic seaboard, and is a famous port of entry and coaling station among the ship lines. Much of the country round about is beautiful in the extreme, and man could scarcely wish for more magnificent and picturesque sites for homes than are offered here. To add to these advantages the atmosphere is wonderfully salubrious and invigorating, and the facilities for acquiring a portion of the land with a home are such that it is within the reach of almost every family to live in its own house. Probably the finest, as well as the most available residence property in this vicinity, is the grand plateau lying near Newport News and between Newport News and Hampton. This plateau is so level that no excavations will be necessary and very little work required to put the streets in good condition. It slopes gently down towards the sea to the water's edge and commands a splendid view of Hampton Roads. An electric street-car line, connecting Newport News with Hampton Roads and Old Point, will pass through the main avenue of this suburban property, placing it within 15 minutes of Old Point and a few minutes from Newport News.

Attention is directed to this property because of the unusual advantages mentioned and the rare opportunity offered to home-seekers and investors by the liberal terms on which it is to be sold and improved. It is the property of the Newport News Co., 821 East Main street, Richmond, Va. This company has always pursued the most

will be offered for sale on exceedingly easy terms. The terms of sale require but five per cent. cash and ten per cent. on each succeeding payment covering a period of 24 months, deferred payments bearing six per cent. interest. The lots and villa sites range in price from \$300 to \$750 each. A pamphlet showing the exact location, giving prices, etc., has been issued by the Newport News Co.

Cask-Stave Jointing Machine.

The cask stave jointing machine shown in the illustration is a wonderful labor saver in its line of work, its capacity enabling it to accomplish what formerly required the service of ten or more experienced men; now one man can adjust the staves and control the whole machine without the least difficulty, and after the stave has left the machine it requires no re-handling, the joints being perfectly water-tight.

The machine is operated in the following manner: The hollowed-out stave, after it has left the planer, is securely fastened to the table by means of three clamp screws, the necessary taper or angle of same being regulated by adjusting the bottom of clamp; to obtain the bilge of the stave it is provided with templates, which can be made of a simple piece of hard wood. The stave thus fastened to the machine is led forward into the cutter by forward motion of the lever and returned with the speed proportioned two to one.

The frame is made out of thoroughly seasoned timber, measuring 12x4 inches, is mounted upon cast-iron supports and fastened together in a manner which prevents any possibility of derangement. There are seven cross pieces mortised in the outside frame and secured with heavy wrought-iron bolts and washers. The table consists of alternate pieces of 2-inch maple and 3/8-inch wrought iron 4 inches thick, planed perfectly true on both sides, with bolts running clear through from end to end. The screw clamps which are bolted to the table are adjustable in a T slot, have a heavy steel screw, and are provided with all the necessary devices to regulate the taper and angle of joints with perfect convenience. The working parts are all made of iron and steel. The feed works are reliable and able to pull through the heaviest cuts. It is under instant control of operator—a motion of the one lever to the right or left instantly stops, starts or reverses the table. The steel cutter head is three-sided, and is fastened to a steel spindle

Pipe-Cutting and Threading Machine.

A new line of the pipe-cutting and threading machines, ranging in size from 1/2 of an inch up, is being made at the Wells Machine Works of Fostoria, Ohio. The illustration herewith shows a hand machine, which can be taken from its base,

The vise has powerful steel jaws constructed to grip the smallest pipe; has longitudinal motion by means of cylindrical arbor and steel rod guides; is actuated as shown by rack and pinion. Larger machines have universal lead screw instantly connected or disconnected at will, which can be used independent of the rack and pinion, and vice versa.



PIPE-THREADING AND CUTTING MACHINE.

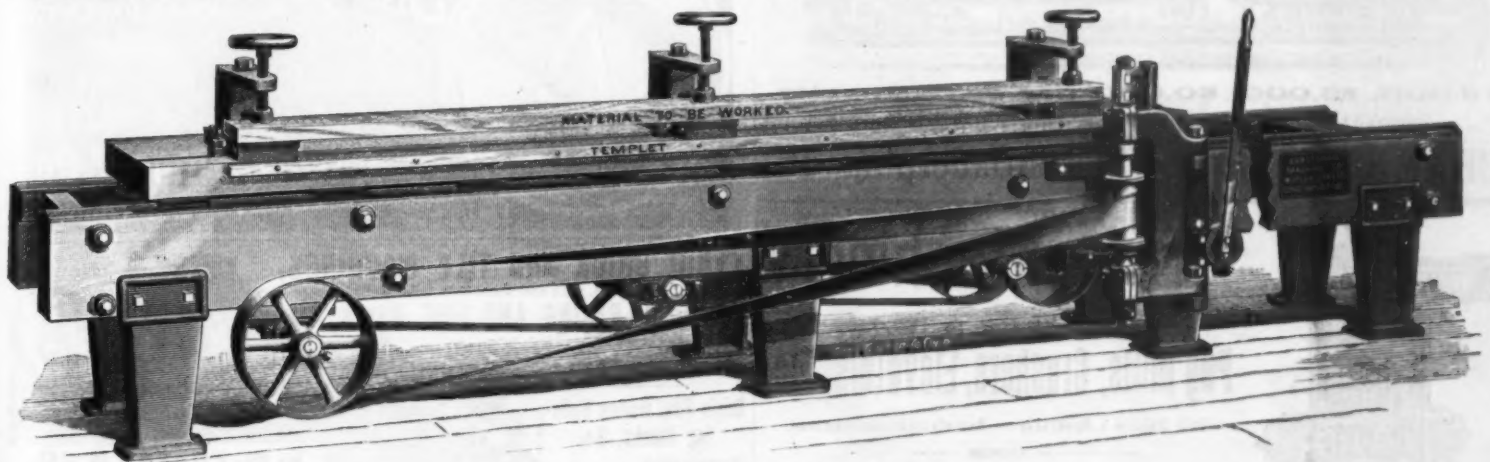
easily transported and fastened to a bench.

The dies are in sections and adjustable, are easily removed and replaced, are gauged to standard fittings, but can instantly be set for variable fittings. They open to remove the threaded pipe without reversing.

The cutting-off mechanism shown is

The Wells Machine Co. publish full descriptive matter of their tools and machines, which will be sent to those interested upon application.

A NEW illustrated catalogue of pulverizers for reducing phosphate rock, all kinds of ores, mineral paints, fire-clay,



CASK STAVE JOINTING MACHINE.

liberal policy, and its disposition to maintain the precedent is manifested by putting this property on the market at conservative actual, instead of inflated boom, prices. It will be sold in beautiful villas and building lots of various sizes. The company will also make all necessary improvements on the grounds and build a number of handsome residences which

two inches diameter, which revolves in extra long, self-oiling boxes provided with a metal take-up step for end play. The swinging frame carrying the cutter head and spindle is very strong and substantial; it is hinged to an iron support by means of heavy steel bearings, and held against the wood templet by a powerful steel spring. The Cordesman Machine Co., of Cincinnati, Ohio, is the maker.

three-wheel cutters, actuated by the same screw that actuates the dies; thus the pipe is cut and threaded with one gripping of the vise, and without removal or change of dies or cutters.

For larger pipe a square cutting off knife with positive screw feed is used, which is illustrated with this combined hand and power machine.

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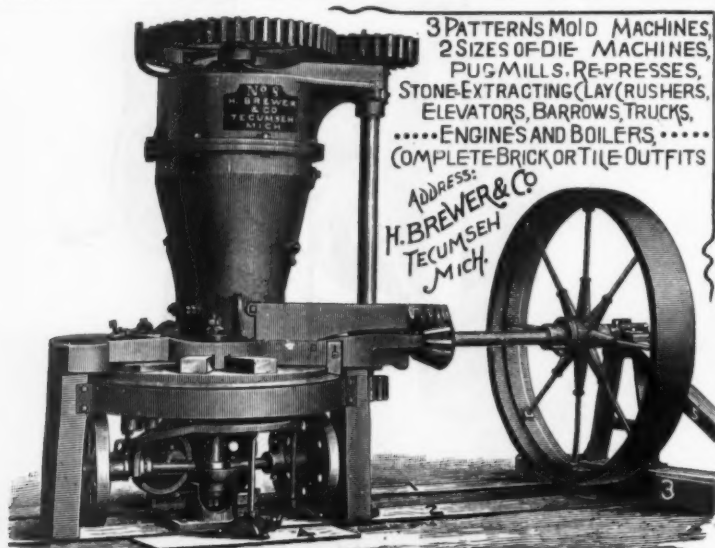
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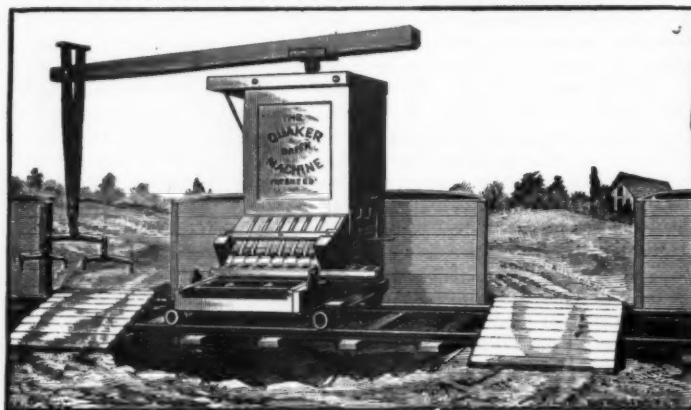
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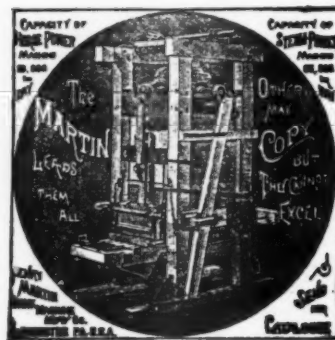
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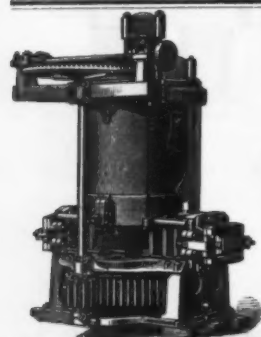
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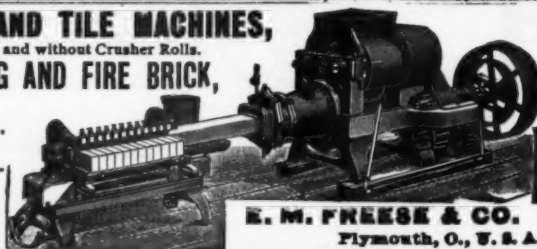
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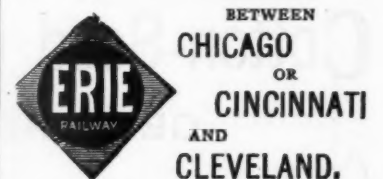
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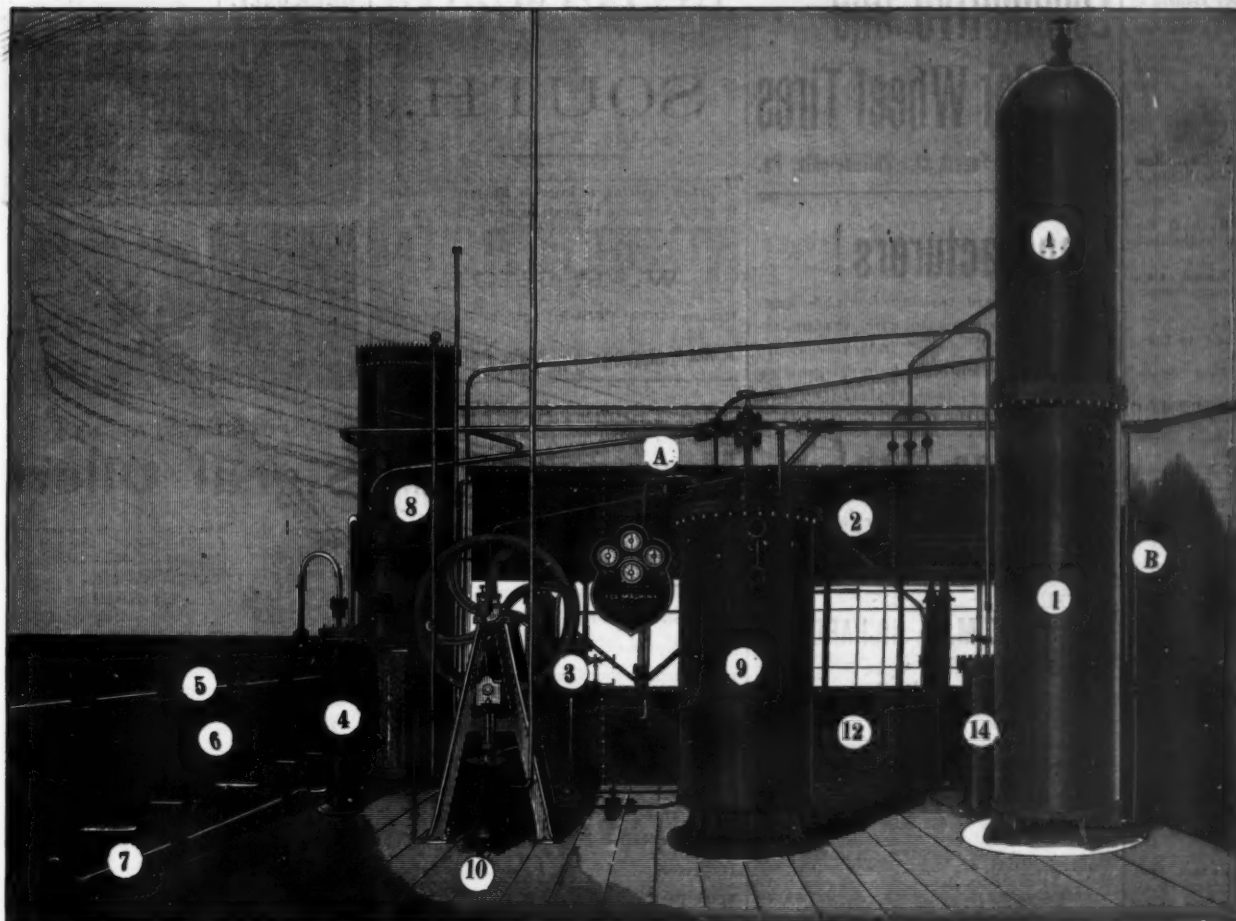
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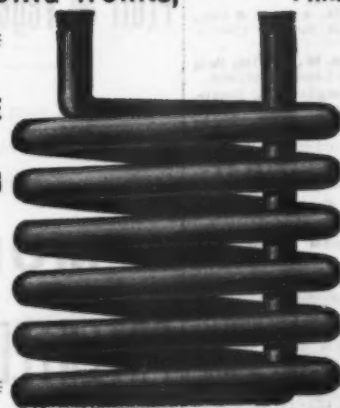
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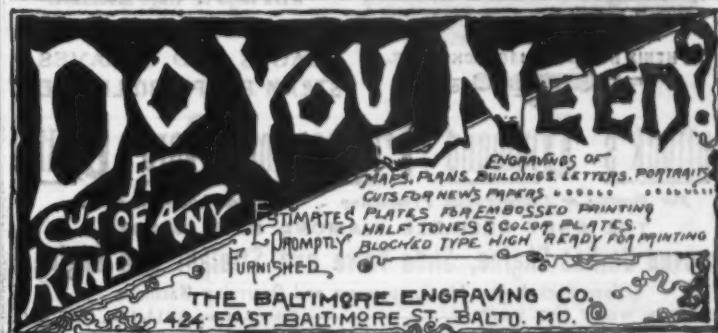
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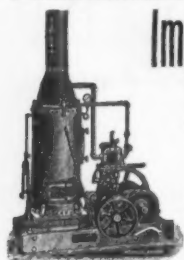
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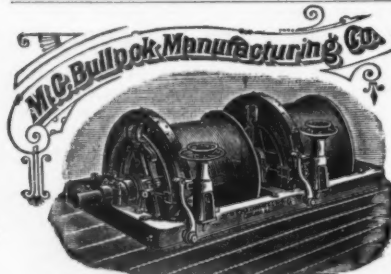
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Gentlemen—In answer to your favor of recent date, I would say that after nearly six months' experience with the "Narod Mill," under varying conditions, I have never regretted the purchase of the one we have. I think the "Narod" is by far the best and most economical Phosphate Grinder on the market. The Mill does not take 20 horse-power to drive it, runs smooth without heating and has never broken down. The product varies a little as to the kind of Phosphate ground, but I have not known it to do less than 3 1/2 tons per hour; under favorable conditions the mill grinds 4 tons per hour and will continue indefinitely. Pieces of iron, &c., getting in with crude material do not bother it, as is the case with most all other mills, and this I consider one of its strongest points. I think \$100 would more than cover the repairs for a year. Yours truly,

C. E. BORDEN,

Supt. Navassa Guano Co.

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Fineness regulated by size mesh of screen in mill.

Capacity—Hard Quartz, 2 1/2 to 3; Phosphates, Cements, etc., 3 1/2 to 4 tons per hour.

Only 15 to 20 horse-power required. Weight of each mill 5,600 pounds. The heavier parts can be made suitable for mountain use.

Pulverizer produces from 20 to 200 mesh fineness Granulator from size of wheat berry to 20 mesh. Both mills fed in size 3/4-inch cube and under. Deliver finished and uniform product through screen into hopper below. Only wearing parts are rolls and ring, which are made of best chilled carbonized iron, dense and fibrous, hence durable.

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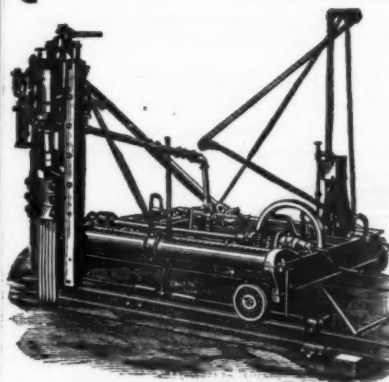
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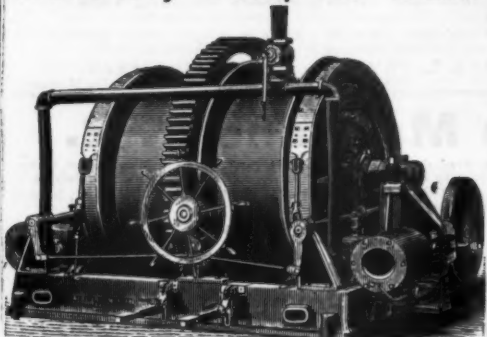
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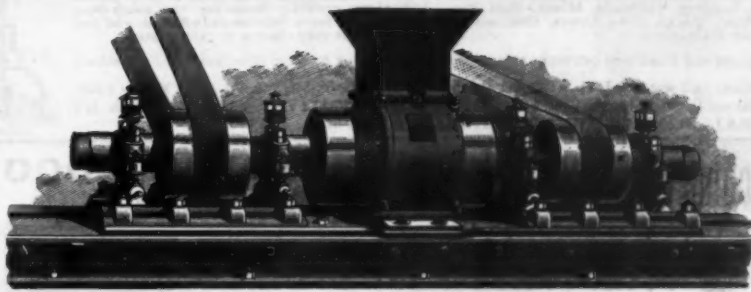
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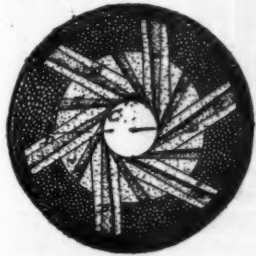
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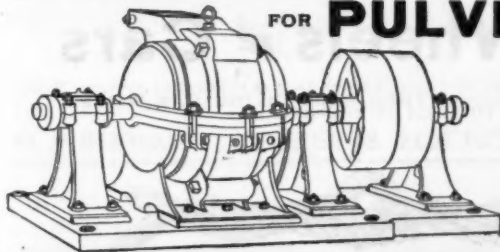


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Size 6—100 to 120 tons per hour.
Size 7—120 to 150 tons per hour.
Size 8—150 to 200 tons per hour.
Size 9—200 to 250 tons per hour.
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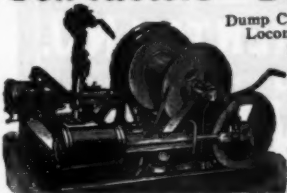
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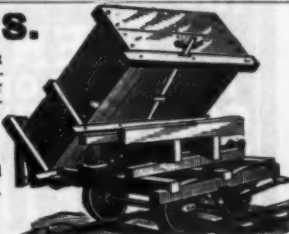
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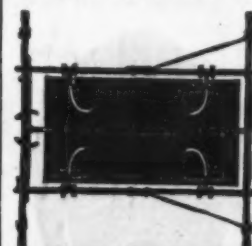
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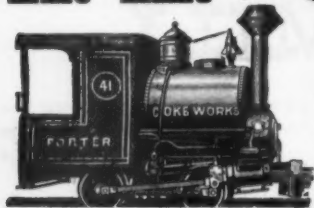
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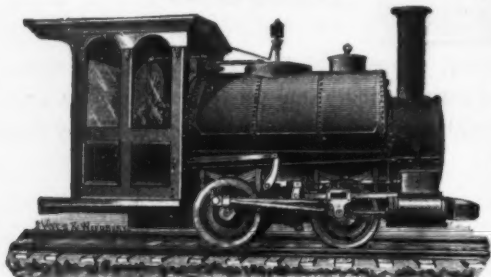
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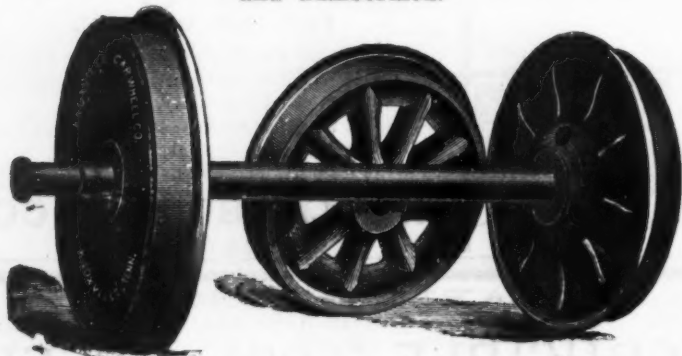
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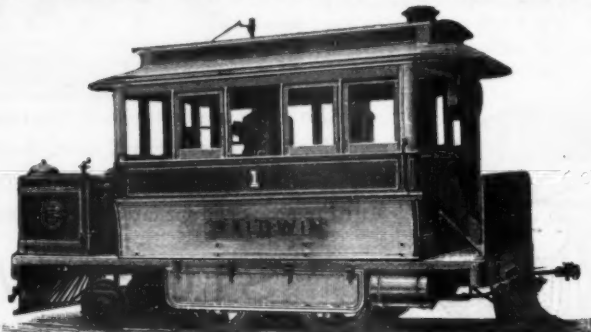
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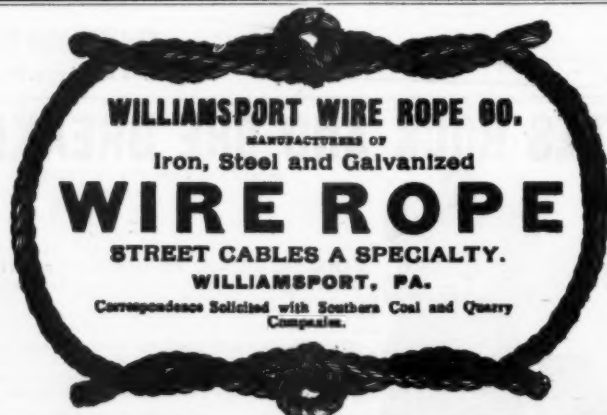
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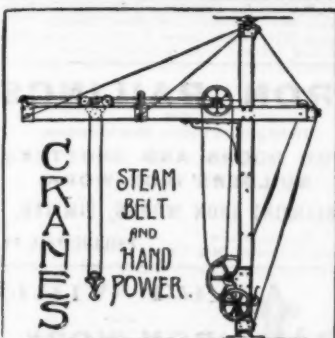
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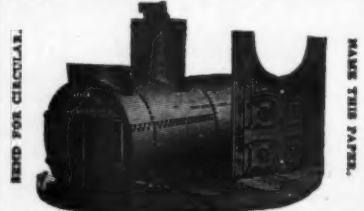
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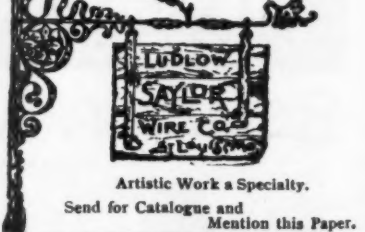
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GENTS—We started mill July 7th. The 12 pair 9x18 rolls you furnished us worked perfectly. They are so easy to adjust, so simple to handle, feed so regularly, grind so nicely and even, and work so smoothly on the whole, that we have no hesitancy in stating that we cannot see how they can have a superior, if equal. Aside from their perfect work, they are models of beauty and finish, and a decided ornament to any mill. We enclose clippings from papers. We are, with best wishes,

Very truly yours,

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For full particulars regarding the best FLOUR OR CORN MILL MACHINERY, address



THE CASE MANUFACTURING CO., Columbus, Ohio.

WESTERN IRON MARKETS.

CINCINNATI, September 5, 1891.

The improvement in general trade has not yet been appreciably felt in crude iron. Nearly all makers are firmly convinced that there will be an improvement later, and are indisposed to take forward contracts at present low prices. It should be noted that some of the very low figures that have been mentioned are for spot delivery and cash, and that the same furnaces making these figures are holding stiff for forward deliveries. There is nothing in the general situation that is not hopeful and full of promise. If it were not for the present large rate of production it is quite certain that iron would begin to move upward very promptly. As it is much will depend upon the further course of the railroads in purchasing supplies and equipment.

In finished iron there is much more active demand. Everything connected with agricultural work, car work, architectural work, etc., is picking up noticeably. The mills are afraid yet to advance prices, but if the present demand keeps up they will shortly mark up figures. This will give pig iron a chance.

The local money market has got into a position of greater ease than has been experienced any time for 12 months. Banks are finding great difficulty in disposing of their funds advantageously on short loans. For some reason the policy is generally pursued of avoiding loans that mature after December. Call money is very cheap, and very favorable arrangements can be made for short time money.

Should the general situation continue healthful and promising, it is thought that the extreme caution as to the future will give place to confidence and financial matters will resume their wonted course.

One feature in the situation which gives promise to all large manufacturers in iron is the better demand for bonds. With railroad and municipal bonds again moving freely there would be a marked change in the temper of the iron trade.

Trussville furnace, in the Birmingham district, started 2d inst. with a complete new equipment; capacity 100 tons per day of coke iron.

We quote for cash f. o. b. Cincinnati:

Southern coke No. 1 foundry.....	\$14 75@15 25
Southern coke No. 2 foundry and	
No. 1 soft.....	13 75@14 00
Hanging Rock coke No. 1.....	16 50@17 50
Hanging Rock charcoal No. 1.....	16 50@17 50
Tennessee charcoal No. 1.....	16 50@17 50
Jackson Co. stone coal No. 1.....	16 50@17 00
Southern coke, gray forge.....	13 50@12 75
Southern coke, mottled.....	12 25@12 50
Standard Alabama C. W.....	19 50@20 50
Tennessee C. W.....	18 00@19 00
Lake Superior C. W.....	19 50@20 50

CHICAGO, September 5, 1891.

Chicago pig-iron market is in a healthy condition. While no large amount of activity is in sight, yet the volume of orders placed is increasing, some of these running well up in size. Small orders are still numerous, but the week has shown placing of a number of 500 tons and up-

wards. Prices remain practically unchanged on metal of all classes. There is, however, less disposition on the part of furnaces and sellers to contract for long scattered deliveries at lowest market figures, and also less inclination to sacrifice values under fear other sellers will in the meantime get all the business going. Market may be said to be firm as to prices, with the demand good for all kinds of coke metal. In charcoal lines one contract of over 1,000 tons Southern iron has just been consummated and other inquiries are in sight. A few additional contracts have been placed for Lake Superior charcoal, these going to two or three smaller furnaces whose order books are still empty in part, figures at which placed being in the vicinity of \$17 at Chicago. All the stronger furnaces in the Lake Superior charcoal district are holding for more money, one or two companies maintaining a firm front at \$18.50 Chicago, and getting from this up to \$19 for all the metal they are able to supply, in addition to the heavy engagements made. These are the most popular brands on the market, and figures given do not indicate the low range of prices which the companies referred to are still willing to make.

The outlook for consumption during balance of the year is good. Railroad buying has not begun as heavily as expected, but some good-sized contracts for material and supplies have been placed. Railroad lines are on the verge of one of the busiest seasons they have ever had, and this is sure to revive general business as soon as proceeds from the crops moved get into circulation.

We quote for cash f. o. b. cars Chicago:

Southern Coke No. 2 foundry.....	\$15 25@16 00
No. 2 soft.....	14 50@15 25
Lake Superior charcoal, Nos. 1-6.....	17 75@18 50

ST. LOUIS, September 5, 1891.

We do not notice any decided change in the market since our last report. What few sales have been made were at very low figures. Some of the Southern furnaces feel sure that prices will advance before a great while, and are not willing to meet, for future delivery, the prices that have recently been made. The outlook, we think, is more encouraging for better prices.

We quote for cash f. o. b. St. Louis:

Southern Coke No. 1 Foundry.....	\$15 50@16 75
No. 2.....	14 50@14 75
No. 3.....	13 75@14 00
Gray Forge.....	13 25@13 50
Charcoal No. 1.....	17 25@17 75
No. 2.....	16 75@17 25
Missouri Charcoal No. 1.....	15 50@16 00
No. 2.....	15 00@15 50
Ohio Softeners.....	18 00@19 00
Lake Superior Car Wheel.....	19 50@20 50
Southern.....	19 50@20 50
Connellsville Foundry Coke.....	5 45

BUFFALO, September 5, 1891.

While there are many favorable indications of the course of trade, a midsummer dullness has hung over the iron market of the past week. The fall trade has hardly opened out, and the fact that prices have been so well sustained under quiet conditions gives great encouragement to producers who are working on such narrow

margins. Lake Superior charcoal iron has shown increased firmness. Other qualities remain unchanged.

We quote for cash f. o. b. cars Buffalo:

No. 1 X Fdy., Strong, Coke iron, Lake Superior ore.....	\$16 50
No. 2 X Fdy., Strong, Coke iron, Lake Superior Ore.....	15 50
Ohio Strong Softener No. 1.....	16 50
Jackson County Silvery No. 1.....	17 50
Lake Superior Charcoal.....	18 25
Tennessee Charcoal.....	17 50@19 00
Southern Strong No. 1.....	16 75
Southern Soft No. 1.....	16 00
Alabama Car Wheel.....	23 00@23 50
Hanging Rock Charcoal.....	23 00@24 00

ROGERS, BROWN & CO.

Middlesborough Notes.

[Special Cor. MANUFACTURERS' RECORD.]

MIDDLESBOROUGH, KY., Sept. 5, 1891.

Mr. L. Van Patton, of Holland, Mich., has purchased the Middlesborough Furniture Factory, and proposes to open that concern at an early date, and to push it for all it is worth. Mr. Van Patton is an old furniture man, and thoroughly posted in the business and has sufficient capital to place it on a solid basis. He has left for his home in Michigan, and expects to return in a few weeks with a sufficient number of skilled artisans to commence operations almost at once.

A very important railroad item is the thorough sleeping service now established between Louisville and Cincinnati and the Atlantic seacoast by way of the Cumberland Gap dispatch line. This service went into operation on Tuesday last, and promises to be one of the most successful routes between the West and East. It is the intention of the Louisville & Nashville Railroad Co. in connection with the Norfolk & Western to establish a thorough sleeper, vestibule and dining coach train.

Great preparations are being made by the citizens of Middlesborough, Cumberland Gap and vicinity, to entertain the 4,000 veterans of Gen. Morgan's command, who will commence to arrive here on the 14th inst. Every house, hotel, store, office building and public house in the city will be brought into play to accommodate the vast throng expected here during the week of the encampment. The merchants of the city have given orders for large quantities of provisions to accommodate the soldiers and their visitors.

The first fair ever held in this section of the country will take place at Arthur, Tenn., during the first week of October. Special rates have been offered by the railroads, and it is expected many will avail themselves of the opportunity to visit this historic point at that time. The little town of Arthur, which is only a few miles from Middlesborough, is rapidly coming to the front, and besides the handsome buildings which are being erected there a handsome race-track and fair grounds are being constructed for the purpose mentioned, and these will be made permanent fixtures.

Mr. Edward F. Powers, of the London board of directors of the Middlesborough Town Co., who has been spending a month in this city, expects to leave during the

early part of next week, accompanied by Mrs. Powers, on his return trip to London.

A handsome new church structure is now being erected in the valley, a few blocks west of the Middlesborough Hotel, by the Congregationalists of this section. When complete it will be one of the largest and handsomest places of worship in the city.

Another pretty and graceful compliment has been paid Middlesborough by Mr. Max Leclerc, the able correspondent of the Paris "Journal Des Debats," who visited here in July a year ago. At a recent meeting of the Mineral & Industrial Society of France held at Saint Etienne on July 4th last the following letter was read, which explains itself:

"Mr. President:

"You will be handed at the same time you receive this letter a pamphlet entitled, 'Souvenir of Middlesborough.' I will explain the reason I send this to you:

"Last summer, while making a tour of the United States, I visited a growing young city in the State of Kentucky, where stout-hearted pioneers were building a mineral and industrial city in the Cumberland mountains, surrounded by coal and iron of immense value. I wrote my impressions of this visit in some letters which appeared in the 'Journal Des Debats' some months ago. I was dumb-founded at what I saw, and the only regret I feel is that among all those men who were accumulating fortunes in marvelous Middlesborough, not a single Frenchman could be seen among them. This appears all the more strange to me, for we all know that hundreds of young men graduate from the colleges and academies of France yearly, and that they seek employment at salaries which scarcely give them a living, their main desire appearing to be allowed to remain in their native country. In my articles to the Journal Des Debats I expressed these same regrets.

"It is no doubt for this reason that the company which is now building the city of Middlesborough has forwarded to my address 1,000 of the souvenirs, translated into French, with the request that I distribute them to those who might feel an interest in such a development.

"I am informed by Mr. Baudry that every three months you publish the official bulletin of the Mineral & Industrial Society of France, and that you might be induced to receive, with my compliments, these handsome American pamphlets to present as a bonus to the subscribers of your publication, and hoping that perhaps a few of our countrymen, after reading such a glowing description of that enterprising town, so far away, might venture there to seek the fortune and success they cannot find at home. I therefore propose to you, sir, and place at your disposal 800 of these souvenirs that you can distribute, should you so desire, with the next number of your bulletin. You can also add in the bulletin a few words explaining the object of these pamphlets.

"I take pleasure in sending you my article in the 'Journal Des Debats' on Middlesborough to assist you in this work."

The Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, September 9, 1901.

The month of September has not developed that demand or that degree of interest in the iron trade which has been looked for during the dull summer months. Buyers everywhere have been sailing close to shore; makers have been doing practically the same thing. There has been no inducement to make large purchases, and very little opportunity of making large sales, excepting at sacrifices, which makers are in no mood to extend at this time. The fact is that makers of all kinds of iron and steel are hanging on to the hope that prices will advance. Their margins are certainly not very encouraging, but from all present indications they will have to be content with them for months to come. The strongest feature in the iron trade is that production is kept well in hand; there is very little iron or steel sold because it has to be sold; manufacturers are avoiding the dangers of overproduction. Our advices from all sections of the country are to the same effect, namely, that production and demand are kept pretty even. In Southern markets very little has transpired worthy of notice. At several Southern points inquiries have been received from large Northern buyers, evidently for the purpose of finding the tone of the market. Buyers of all kinds of iron and steel are anticipating a general swell in the volume of business, growing out of the enormous crops and the anticipated heavy demand abroad. Out of this they expect either an advance in prices or an expansion of demand, probably both, and hence there are some suspicions of an upward tendency in prices. This leads to the increased inquiry referred to.

The Southern furnaces are running along as usual. Throughout the West there is an improving demand, especially at Chicago and St. Louis. Large orders for structural iron are being placed. Track supplies are also in demand. At Cincinnati a steady demand is reported for all kinds of material, crude and finished. At Louisville evidences of an improving demand are more apparent. At Pittsburg no decided expansion has yet taken place, but mill men are preparing for it. At Cleveland the report is that all furnaces in Ohio are well sold up. At New York dull conditions continue.

Quotations are at Northern tide-water points: \$14 to \$14.75 for gray forge; No. 2, \$16 to \$16.50; No. 1, \$17 to \$18; foreign billets, \$31.25; domestic wire rods, \$37.50; steel rails, \$30.50 to \$31; angles, 1 1/2; tees, 2.50; beams, 3.10; steel plates, 2 1/2; merchant bar, 1.70 to 1.80; Southern No. 1 coke at Cincinnati, \$15; gray forge at Pittsburg, \$14; No. 1 foundry, \$16.50; Bessemer iron, \$15.50 to \$16.

HARDWARE.

A well-known dealer says: "While it would be hardly fair to state that general demoralization of prices now prevailed, it is susceptible of demonstration that prices are most unsatisfactory to the manufacturers, and some items in staples are sold

below the actual cost of production. Chains, copper rivets, tackle blocks, door locks and other items which could be mentioned would be included in the above category, and only the possible improvement in the future warrants the running of factories in the same and similar lines." The state of trade continues without change, either in volume or values. Goods are moving perhaps a shade more freely.

Do you want some second-hand cotton machinery? It is in good running order. See advertisement of Davol Mills, Fall River, Mass., on page 48, and write them for prices, terms, &c.

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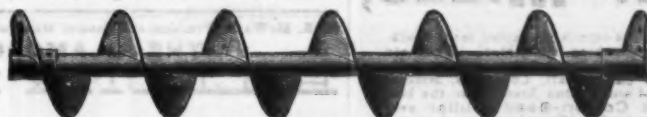
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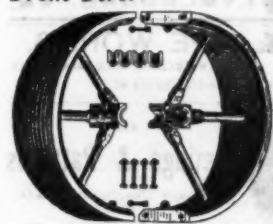
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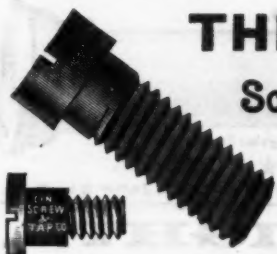
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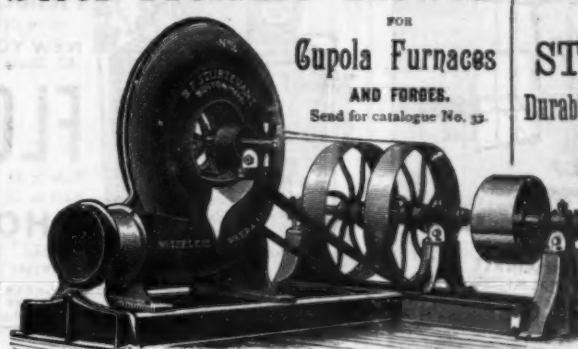
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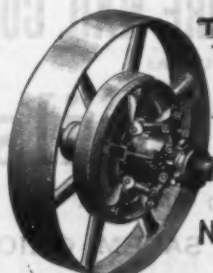
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MADE BY **THE CANTON STEEL ROOFING CO., CANTON, O.**

Eastern Lumber Markets.

[Special Cor. MANUFACTURERS' RECORD.]

NEW YORK, September 8, 1891.

Lumber dealers all through the city are making a vigorous canvass of the city and surrounding country for the purpose of capturing as much of the new fall trade as they possibly can before the opportunity slips by. There is great hope and faith in the future. An abundant supply of lumber for all ordinary demand is apparent. Wholesalers are trying to work off as much of their accumulated stock as possible, but very few of them have made the concessions which buyers generally desire when a dealer shows anxiety to unload. The situation has not improved in any particular as yet. Of course, a general improvement in the lumber trade is predicted on all sides, and honestly so. The season, however, is too far spent to look for more than a spurt. The character of the present demand is steady, and prices are not crowded down to an unremunerative point by any means, still there is a feeling of disappointment in this, the ninth month of the year. Perhaps, if a count was had, it would be found that we have not fallen perceptibly behind last fall's distribution. The coarser and cheaper grades of white pine are meeting with fair demand just now. In Southern lumber a steady demand has been maintained all through the summer, and some dealers think that since the first of this month business is slightly better; if so, the improvement is in flooring boards, both rough and dressed. There has been a very close competition between yellow pine men and late lumber men.

Hemlock has met with a very good demand all year, and the larger dealers, especially in Pennsylvania, are satisfied with results.

The hardwoods have not kept up quite as well as some of the coarser woods. Quartered oak has not fallen in demand or price. A good deal of poplar is coming in. Philadelphia is having a poplar association. A good deal of cherry is wanted, but only the best qualities, and some little of it is called for in foreign markets. Car builders will be large buyers of lumber during the coming autumn and winter, it is now stated. Taking the season all through, there has been no disappointment felt by the larger Southern manufacturers and dealers in lumber with reference to Northern markets. The white pine men have perhaps made a more bitter struggle to hold their own. This is to be expected. There has been an ample supply of lumber all through the year.

Quotations for best No. 1 N. C. flooring, dressed, car lots, \$22.50; No. 2, \$18.50; No. 3, \$16 for 1-inch; rift flooring, \$30; 1-inch ceiling, \$23; 1-inch stocks, \$24; rough N. C. pine, 1-inch stock, \$21 to \$22; 1-inch siding, \$18.50; yellow pine ranges from \$18.50 to \$19.50 for random orders; heart face boards, \$20.50; common siding, \$12 to \$13; flooring, \$21; stepping, \$25. These quotations are subject to variations for sizes of order and inspection. White pine selects are quoted at \$40; fine common 1-inch, \$36; box boards, \$13.50; shelving, No. 1, \$30.

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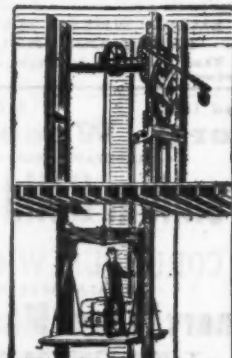
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Our Asbestos Roofing is now in use upon Factor-
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It is adapted for steep or flat roofs in all climates,
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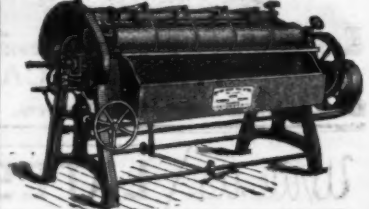
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REORGANIZED AND EQUIPPED.

An Important Meeting and What It Accomplished.

[Special Cor. MANUFACTURERS' RECORD.]
BLACKSBURG, S. C., Sept. 1, 1891.

An important meeting of the stockholders of the Magnetic Iron & Steel Ore Co. was held at Cherokee Inn, in this city, August 28, at which an entire reorganization was effected and plans were made for the immediate commencement of work. During the past six months much stock has changed owners, several parties holding large blocks of it having sold out to citizens of this and other Southern States. Among those present were J. O. Mathewson and others, of Augusta, Ga.; Col. Hoyt, Capt. O. P. Mills, Frank Hammond, Avery Patton, A. G. Firman and Messrs. Wilkins, Jennings and Perry, all of Greenville, S. C.; also stockholders from Charleston, from Atlanta, Ga., and from Florida and Texas. The following directors were elected, viz: John L. Jones, of Blacksburg; John L. Black, Frank Hammond and Avery Patton, of Greenville; J. O. Mathewson, of Augusta, and N. P. Pratt, of Atlanta, Ga., and John T. Wilder, of Johnson City, Tenn. The latter was a member of the former board. The directors at a special meeting elected officers as follows: President, John F. Jones; vice-president and general manager, John L. Black; secretary and counsel, Jas. F. Heart; treasurer, A. G. Firman; chemist and mining engineer, Dr. N. A. Pratt, of Jacksonville, Fla.

Major John F. Jones, the president, is a native of Massachusetts and is well known through New England, where for many years he was connected with railroad interests and won a reputation for great skill as a railroad builder and executive. He came to this State in the interests of the Massachusetts & Southern Construction Co. and planned and constructed that part of the Three Cs Railroad between Rutherfordton, N. C., and Blacksburg, which was at the time pronounced by experts the best piece of railroad work at the least cost that had ever been done in the South. He designed and built the Cherokee Inn and has developed many of the new local industries of Blacksburg. He organized and is president of the Blacksburg Land Co. His election to the presidency of the Magnetic Iron & Steel Ore Co. is generally regarded as an assurance that its new owners mean business and intend to commence operations immediately.

Col. John Logan Black is a native of South Carolina. He was a cadet at West Point in the same class with Gen. O. O. Howard and other officers of high rank in the armies of the Union and the Confederacy. He served the latter with distinction, and after the war he was for some time influentially identified with the development of the phosphate industry at Charleston. His father was one of the chief ironmasters of South Carolina for many years and conducted an extensive and profitable mining and furnace business in this vicinity. Some years since Colonel Black determined to revive that industry, and he has since worked assiduously and intelligently to that end. He opened the shafts into the vast deposits of magnetic ore and brought about the organization of the corporation of which he has been made the general manager. He knows what is needed and how to do it, and now will be able to demonstrate that all he has heretofore written and said about the intrinsic value of these ores was true.

That Gen. John T. Wilder, of Johnson City, is one of the directors of this company is a fact of much significance. General Wilder came here several years since and made a careful examination of the various ores, and especially of the magnetic deposits. He took stock in the com-

pany, and in addition to that he purchased a considerable tract containing a well-defined vein of the same high grade ore. His large experience will be of great value to his associates in the directory.

The plan adopted at the stockholders' meeting, which will be followed by the executive management, is to mine the high grade ores and ship them to furnaces, from which a large demand is already opened. Repeated tests have shown that these ores are free from phosphorus and titanium, and carry 64 per cent. of metallic iron. The company will convert their low grade ores into iron and steel at the mines as soon as they can get ready for that purpose. The company owns 14,000 acres of mineral land in this immediate vicinity that equal in value any of like area in the world. Limestone is close at hand; manganese also, and at the present price for coke delivered these materials can be put into the furnace at a cost per ton that will enable this company and this section to compete successfully with any other in the country. On the basis that labor here costs the same per ton of iron ore produced that it does in Pennsylvania, it is possible to make Bessemer pig here and deliver it in that State cheaper than it can be made in the furnaces there.

South Carolina needs an iron center, a large manufacturing city, and this place, once the seat of a considerable iron industry, is destined to occupy that relation to the rest of the State; and because of its high grade ores, its comparative nearness to many large consuming centers, its railroad connections with many seaport and interior cities, it ought in time to become one of the greatest manufacturing cities of the entire South.

Many of the stockholders were accompanied by their wives, numbers of whom were so much charmed with the climate and scenery and with the comforts and good cheer of Cherokee Inn that they decided to remain here for a few days. A number of West Point classmates of Col. Black came at the same time to hold a quiet reunion. Among these were Col. W. J. Green, Generals Boggs and Lee and ex-Governor Lubbock, of Texas, the Colonel's brother-in-law. The presence of so many strangers in our little city gave to our people a foretaste of what might be expected next winter when the inn will be filled to its capacity with Northern visitors, and of that larger influx that will follow close upon the development which the Magnetic Iron & Steel Ore Co. is now prepared to inaugurate.

THE South Carolina Railway Co. has long desired to run tracks along the Cooper river front at Charleston to the docks of the Steamship Navigation Co., but has been thwarted by one of the land owners, who refused to grant a right of way through his property. The company finally applied to the court to order the empanelling of a jury to appraise the property so that a right of way might be secured at a reasonable valuation. Judge Isler granted the petition, a jury was selected, and a day appointed for the condemnation proceedings. It is probable that the South Carolina Railway Co. will now obtain its long desired and quite necessary right of way.

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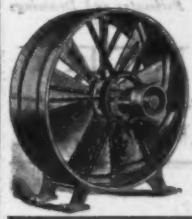
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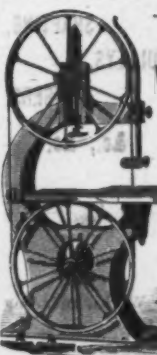
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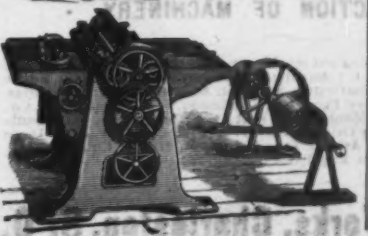
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Corn and oats, 30 to 40 " " " "
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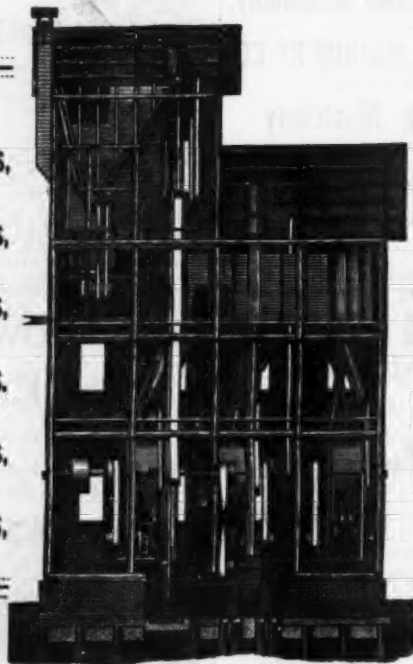
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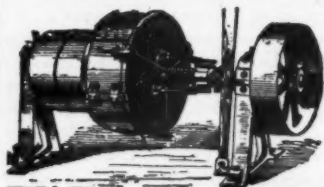
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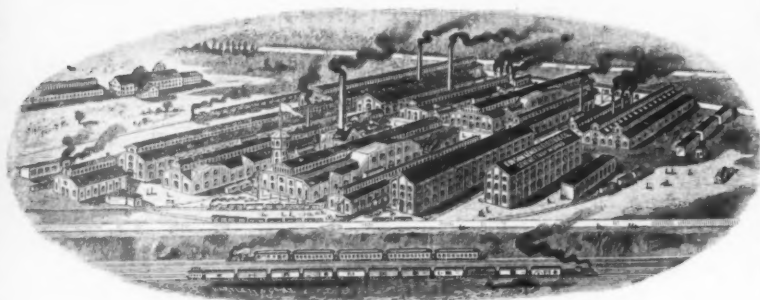
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[FOR "CLASSIFIED INDEX," SEE PAGE 2.]

XIX



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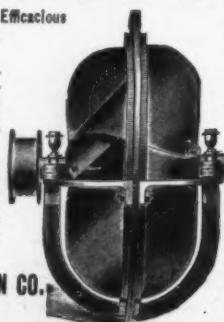
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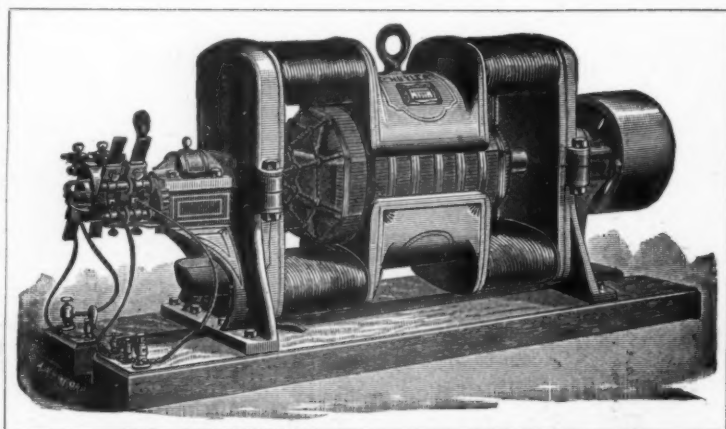
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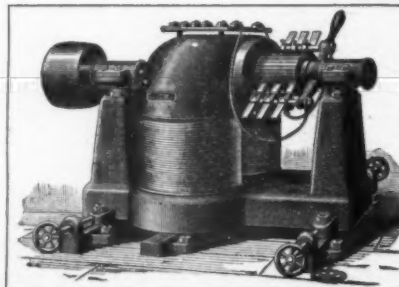
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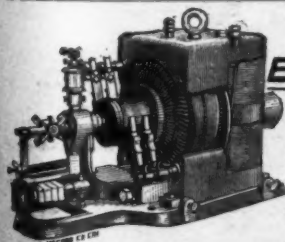
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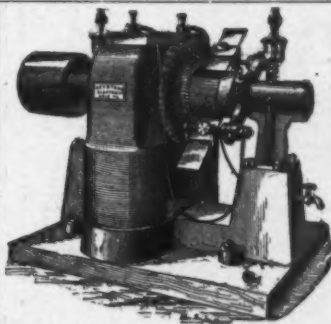
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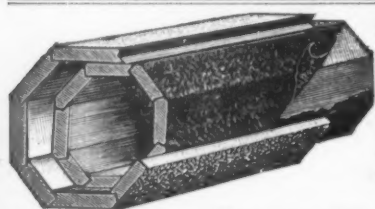
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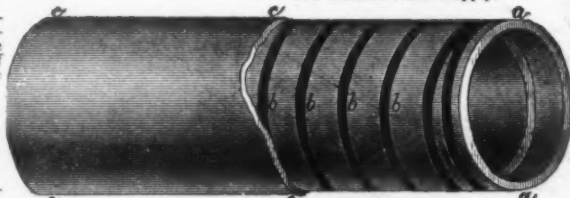
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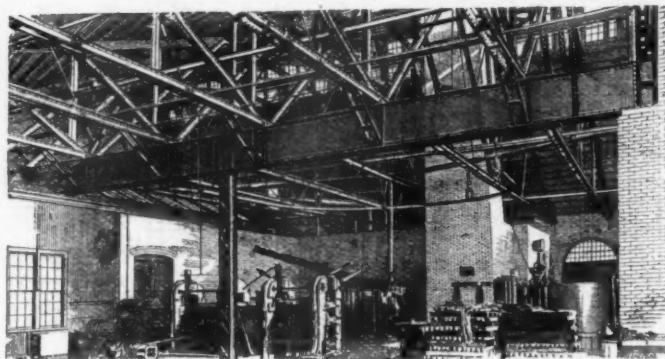
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